

Fanshawe College

FIRST: Fanshawe Innovation, Research, Scholarship, Teaching

Documentation (Approvals etc...)

Aviation Technician - Aircraft Maintenance

2014

AAM1 Curriculum Modification for 2014-15 2015-16

Fanshawe College

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DEGREE AUDIT CHANGE FORM

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NOV 27 2014

COURSE OR PROGRAM CURRICULUM "RATIONALE FOR CHANGE"

Office of the Registrar

Program Requiring Changes

Program Title: Aviation Technician – Aircraft Maintenance		
Program Number: AAM1	Date Submitted: 10/21/2014	
Dean responsible for program: V. Coligan	Chair: R. Gorrie	
Credential Provided: <input type="checkbox"/> Local Certificate <input type="checkbox"/> Ont. College Certificate <input checked="" type="checkbox"/> Diploma <input type="checkbox"/> Adv. Diploma <input type="checkbox"/> Degree		
Program Intakes: <input checked="" type="checkbox"/> F <input type="checkbox"/> W <input type="checkbox"/> S Other:	Catalogue Year(s) Impacted: 2014-15 & 15/16.	
Residency Requirement: <input checked="" type="checkbox"/> Met or <input type="checkbox"/> Not Met	Date of Last Program Review: Click here to enter a date.	
<i>I have read the reasons for the change and...</i>		<i>Signature and date</i>
Dean of Faculty (responsible for program):	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	<i>V. Coligan Nov 25/14</i>
Dean of Faculty (impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Dean of Faculty (impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Associate Vice President Academic (required for major changes and late DAs):	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	<i>[Signature] 03/09/15</i>
Director, Centre for Academic Excellence:	<input type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	<i>Julie Geddes mar 9/15</i>
Office of the Registrar:	<input checked="" type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	<i>[Signature]</i>

~~✓ Student signatures req'd.~~
~~✓ mapping to outcomes missing~~

Please answer each of the questions below, if applicable. Missing or incomplete information may delay review of the proposed changes.

1.0 Describe proposed change(s). Complete Appendix A (if necessary) and amend SDAR (Refer to Appendix C).

Audit of curriculum by Transport Canada.

2.0 Reason/Rationale for Changes

2.1 The reason for the change is based on:

- ☒ A recent program ~~review~~-audit by Transport Canada
- ☐ College Advisory Committee feedback
- ☐ Program Advisory Committee feedback
- ☐ Student feedback
- ☐ KPI results
- ☐ Accreditation or other regulatory requirements
- ☐ Shared curriculum
- ☐ Trends in the field/industry
- ☐ Other (please describe):

2.2 Does the change support the College's Strategic Framework (mission, vision, values)?

- ☒ Yes
- ☐ No (If no, please explain)

2.3 What strategic goal(s) does the proposed change support?

- ☐ Goal 1 - Enrolment growth
- ☐ Goal 2 - Flexible delivery options
- ☒ Goal 3 - Premier student experience
- ☐ Goal 4 - Sustainable College life

3.0 Students

3.1 Will the change affect the cost of the program for students?

Level 1+2
Students currently
registered in
courses not on
the degree audit

2015/16 still to come.

4.0 Program Learning Outcomes

4.1 Will the proposed change meet the Program Vocational Learning Outcomes? (Complete Appendix B)

☒ Yes

☐ No

4.2 Are there any implications related to progression because of pre-requisite courses (and/or co-requisite courses)?

☒ No

☐ Yes (If yes, please explain)

5.0 Relationships with Other Programs

5.1 Is this course part of any other Fanshawe College program(s)?

☒ No

☐ Yes (If yes, please identify the other program(s))

5.2 What Schools/Campuses will be impacted by the proposed change?

☐ Tourism and Hospitality

☐ Information Technology

☐ Lawrence Kinlin School of Business

☐ Health Sciences

☐ Human Services

☐ Nursing

☐ Design

☐ Language and Liberal Studies

☐ Contemporary Media

☐ Building Technology

☐ Applied Sciences and Technology

☒ Transportation Technology

☐ Continuing Education

☐ Oxford County Campus

☐ James N. Allan Campus

☐ St. Thomas Campus

5.3 Will the change affect pathway agreements (e.g., bridging, internal articulations, laddering, advance standing) with other Fanshawe programs and/or other institutions?

☒ No

☐ Yes (If yes, please explain)

5.4 What discussions have been initiated with these institutions regarding the changes?

6.0 Resource Implications of Proposed Changes

6.1 Will the proposed change have staffing implications?

- ☒ No
☐ Yes (If yes, please explain)

6.2 Will the proposed change impact any of the Enabling areas?

- ☒ No
☐ Yes (If yes, please explain)

6.3 Will the proposed change affect space and/or technology requirements?

- ☒ No
☐ Yes (If yes, please explain)

7.0 General College Requirements

7.1 Are changes consistent with Colleges policies/practices?

- ☒ Yes
☐ No (If no, please explain)

7.2 Total Program Hours after degree audit change: 2040

7.2.1 Are these hours consistent with the requirements as listed below?

- ☒ Yes
☐ No (If no, please explain)

Local Certificate - 300 hours	Ontario College Certificate - 600 hours
Diploma - 1200 to 1400 hours	Advanced Diploma - 1800 to 2000 hours
Graduate Certificate - 600 hours	

7.3 Will the program meet the General Education requirements (Policy 2-B-02) as listed below?

- ☐ No
☒ Yes

Local Certificate, Ontario College Certificate and Graduate Certificate - none required)	Diploma - 3 required (minimum of 1 must be an elective)	Advanced Diploma - 4 required (minimum of 2 must be electives)
-------------------------------------------------------------------------------------------------	----------------------------------------------------------------	-----------------------------------------------------------------------

- 7.4 Will the program have 25% distinct curriculum to meet the Residency Requirement of 25% credit units? Consider all pathway agreements (e.g., bridging, internal articulations, laddering, advance standing) with other Fanshawe programs and/or other institutions.

☐ No

☒ Yes

Note: In accordance with POLICY NUMBER: 2-B-17 Graduation from Approved College Programs

...to be eligible for any College Credential a student must be enrolled and complete at least 25% of that program's credit units at Fanshawe College, unless stipulated differently by other approving bodies such as the Postsecondary Education Quality Assessment Board (PEQAB).

APPENDIX A: PROPOSED DEGREE AUDIT CHANGES (for CAE)

Course Code	Existing DA Courses	Total Hours	Total Credits	Describe proposed changes	Course Code	Proposed DA Courses	Total Hours	Total Credits
Level 1								
AVIA-1024	Aircraft Safety/Shop Practices	30.00	1.50		Same	Aircraft Safety/Shop Practices	30.00	1.50
AVIA-1025	Aircraft Corrosion Control	60.00	3.00		Same	Aircraft Corrosion Control	60.00	3.00
AVIA-1026	Aircraft Tools/Procedures	120.00	6.00	Total hours/credit units change.	AVIA-1049	Aircraft Tools/Procedures	60.00	3.00
AVIA-1027	Fixed Wing Aerodynamics	60.00	3.00	Total hours/credit units change.	AVIA-1050	Fixed Wing Aerodynamics	90.00	4.50
AVIA-1028	Aircraft Reciprocating Engines	120.00	6.00	Total hours/credit units change	AVIA-1051	Aircraft Reciprocating Engines	150.00	7.50
AVIA-1029	Aircraft Propellers	60.00	3.00	Total hours/credit units change	AVIA-1052	Aircraft Propellers	30.00	1.50
AVIA-1030	Aircraft DC Electrical Systems	90.00	4.50		Same	Aircraft DC Electrical Systems	90.00	4.50
TOTAL		540.0	27.0	TOTAL			510.0	25.5
Level 2								
AVIA-1031	Aircraft Metallic Structure & Metallurgy	120.00	6.00			Aircraft Metallic Structure & Metallurgy	120.00	6.00
AVIA-1032	AIRCRAFT Hydraulics/Ctrls/ Emerg Equipment	150.00	7.50			AIRCRAFT Hydraulics/Ctrls/ Emerg Equipment	150.00	7.50
AVIA-1033	Canadian Aviation Regulations	30.00	1.50			Canadian Aviation Regulations	30.00	1.50
AVIA-1034	Aircraft Drawings/ Diagrams	60.00	3.00	Total hours/credit units change.	AVIA-1053	Aircraft Drawings/ Diagrams	30.00	1.50
AIVA-1035	Rotary Wing Aerodynamics	90.00	4.50			Rotary Wing Aerodynamics	90.00	4.50
AVIA-1036	Aircraft AC Electrical Systems	90.00	4.50			Aircraft AC Electrical Systems	90.00	4.50
TOTAL		540.0	27.0	TOTAL			510.0	25.5
Level 3								
AVIA-1037	Aircraft Management & AMO	30.00	1.50		Same	Aircraft Management & AMO	30.00	1.50
AVIA-1038	Aircraft Materials/Hardw are	60.00	3.00		Same	Aircraft Materials/Hardwar e	60.00	3.00
AVIA-1039	Aircraft Non-Metallic Structure & Comp	120.00	6.00		Same	Aircraft Non-Metallic Structure & Comp	120.00	6.00
AVIA-1040	Aircraft Gas Turbine Engines	120.00	6.00		Same	Aircraft Gas Turbine Engines	120.00	6.00

-30

-30

Course Code	Existing DA Courses	Total Hours	Total Credits	Describe proposed changes	Course Code	Proposed DA Courses	Total Hours	Total Credits
AVIA-1041	Aircraft Water, Fuel & Ignition Systems	90.00	4.50		Same	Aircraft Water, Fuel & Ignition Systems	90.00	4.50
Avia-1042	Aircraft Airline Electrical	90.00	4.50		Same	Aircraft Airline Electrical	90.00	4.50
TOTAL		510.0	25.5	TOTAL			510.0	25.5
Level 4								
AVIA-1043	Aircraft Inspection & Records	90.00	4.50		Same	Aircraft Inspection & Records	90.00	4.50
AVIA-1044	Advanced Maintenance Techniques	120.00	6.00		Same	Advanced Maintenance Techniques	120.00	6.00
AVIA-1045	Aircraft Turbine Engine Maintenance	90.00	4.50		Same	Aircraft Turbine Engine Maintenance	90.00	4.50
AVIA-1046	Aircraft Starting & Indications	90.00	4.50		Same	Aircraft Starting & Indications	90.00	4.50
AVIA-1047	Avionics – Intro	120.00	6.00		Same	Avionics – Intro	120.00	6.00
TOTAL		510.0	25.5	TOTAL			510.0	25.5
Level 5								
TOTAL				TOTAL				
Level 6								
TOTAL				TOTAL			2040.	

Degree Audit Report

Catalog: 2015/2016

Program: AAM1

Name: Aviation Technician - Aircraft Maintenance

Department: MPW - Transportation Technology

Academic Level: PS

CCD: 8 - 4AcadSem/1200-1400hrs

Credential: Ontario College Diploma

Grade Scheme: LG2

Major: AAM1 - Aviation Tech'n-Aircraft Mtnce

Div: MPW - Motive Power Division

Co-Op Indicator: N/A

Academic Program Requirement

Total Credits: 117.00

Residency Reqmt: 30.00

GPA Requirement: 2.000

Residency Reqmt GPA: 2.000

Minimum Grade: D

Academic Requirement: AAM1.15 Aviation Technician - Aircraft Maintenance

Major: AAM1

Grade Scheme: LG2

Minimum GPA: 2.000

Minimum Grade:

Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1024	Aircraft Safety/Shop Practices	30.00	1.50	
AVIA-1025	Aircraft Corrosion Control	60.00	3.00	
AVIA-1026 — 1049	Aircraft Tools/Procedures	60.00	120.00	6.00 3.00
AVIA-1027 — 1050	Fixed Wing Aerodynamics	90.00	60.00	3.00 4.50
AVIA-1028 — 1051	Aircraft Reciprocating Engines	150.00	120.00	6.00 7.50
AVIA-1029 — 1052	Aircraft Propellers	30.00	60.00	3.00 1.50
AVIA-1030	Aircraft DC Electrical Systems	90.00	4.50	

Subrequirement: Level 2

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1031	Aircraft Metallic Structure & Metallurgy	120.00	6.00	
AVIA-1032	Aircraft Hydraulics/Ctrls/Emerg Equip	150.00	7.50	
AVIA-1033	Canadian Aviation Regulations	30.00	1.50	
AVIA-1034 — 1053	Aircraft Drawings/Diagrams	30.00	60.00	3.00 1.50
AVIA-1035	Rotary Wing Aerodynamics	90.00	4.50	
AVIA-1036	Aircraft AC Electrical Systems	90.00	4.50	

Subrequirement: Level 3

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

Total Total GE

Degree Audit Report

		Hours	Credits
AVIA-1037	Aircraft Management & AMO	30.00	1.50
AVIA-1038	Aircraft Materials/Hardware	60.00	3.00
AVIA-1039	Aircraft Non-Metallic Structure & Comp	120.00	6.00
AVIA-1040	Aircraft Gas Turbine Engines	120.00	6.00
AVIA-1041	Aircraft Water, Fuel & Ignition Systems	90.00	4.50
AVIA-1042	Aircraft Airframe Electrical Systems	90.00	4.50

Subrequirement: Level 4

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1043	Aircraft Inspection & Records	90.00	4.50	
AVIA-1044	Advanced Maintenance Techniques	120.00	6.00	
AVIA-1045	Aircraft Turbine Engine Maintenance	90.00	4.50	
AVIA-1046	Aircraft Starting & Indications	90.00	4.50	
AVIA-1047	Avionics-Intro	120.00	6.00	

Subrequirement: Gen Ed - Electives

Take 9 General Education Credits -

Normally taken in Levels 2, 3 and 4

Subrequirement: Program Residency

Students must complete a minimum of 30 credits in this program at Fanshawe College to meet the Program Residency requirement and Graduate from this program

[Signature]
Approved By Chair/Manager:

[Signature]
Approved by Dean:

MPW *Nov 25/14*
Department and Date:

Nov 25/14 *FTY*
Date:

General Education Approved By(as appropriate):

Date:

[Signature]
03/08/15

DEC 04 2014

REGISTRAR

Degree Audit Report

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NOV 27 2014

Catalog: 2015/2016

Office of the Registrar

Program: AAM1

Name: Aviation Technician - Aircraft Maintenance

Department: MPW - Transportation Technology

Academic Level: PS

CCD: 8 - 4AcadSem/1200-1400hrs

Credential: Ontario College Diploma

Grade Scheme: LG2

Major: AAM1 - Aviation Tech'n-Aircraft Mtncs

Div: MPW - Motive Power Division

Co-Op Indicator: N/A

Academic Program Requirement

Total Credits: 117.00

Residency Reqmt: 30.00

GPA Requirement: 2.000

Residency Reqmt GPA: 2.000

Minimum Grade: D

Academic Requirement: AAM1.15 Aviation Technician - Aircraft Maintenance

Major: AAM1

Grade Scheme: LG2

Minimum GPA: 2.000

Minimum Grade:

Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1024	Aircraft Safety/Shop Practices	30.00	1.50	
AVIA-1025	Aircraft Corrosion Control	60.00	3.00	
AVIA-1026 /1049	Aircraft Tools/Procedures	60.00	120.00	6.00 3.00
AVIA-1027 /1050	Fixed Wing Aerodynamics	90.00	60.00	3.00 4.50
AVIA-1028 /1051	Aircraft Reciprocating Engines	150.00	120.00	6.00 7.50
AVIA-1029 /1052	Aircraft Propellers	30.00	60.00	3.00 1.50
AVIA-1030	Aircraft DC Electrical Systems	90.00	4.50	

Subrequirement: Level 2

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1031	Aircraft Metallic Structure & Metallurgy	120.00	6.00	
AVIA-1032	Aircraft Hydraulics/Ctrls/Emerg Equip	150.00	7.50	
AVIA-1033	Canadian Aviation Regulations	30.00	1.50	
AVIA-1034 /1053	Aircraft Drawings/Diagrams	30.00	60.00	3.00 1.50
AVIA-1035	Rotary Wing Aerodynamics	90.00	4.50	
AVIA-1036	Aircraft AC Electrical Systems	90.00	4.50	

Subrequirement: Level 3

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

Total Total GE

Degree Audit Report

		Hours	Credits
AVIA-1037	Aircraft Management & AMO	30.00	1.50
AVIA-1038	Aircraft Materials/Hardware	60.00	3.00
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AVIA-1040	Aircraft Gas Turbine Engines	120.00	6.00
AVIA-1041	Aircraft Water, Fuel & Ignition Systems	90.00	4.50
AVIA-1042	Aircraft Airframe Electrical Systems	90.00	4.50

Subrequirement: Level 4

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1043	Aircraft Inspection & Records	90.00	4.50	
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Subrequirement: Gen Ed - Electives

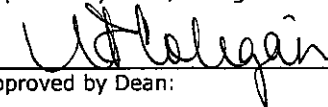
Take 9 General Education Credits -


Normally taken in Levels 2, 3 and 4

Subrequirement: Program Residency

Students must complete a minimum of 30 credits in this
program at Fanshawe College to meet the Program Residency
requirement and Graduate from this program


 Approved By Chair/Manager:


 Approved by Dean:


 Department and Date:


 Date:

General Education Approved By(as appropriate):

Date:


 03/10/15

DEGREE AUDIT CHANGE FORM

COURSE OR PROGRAM CURRICULUM "RATIONALE FOR CHANGE"

Program Requiring Changes

Program Title: Aviation Technician – Aircraft Maintenance		
Program Number: AAM1	Date Submitted: 10/21/2014	
Dean responsible for program: V. Coligan	Chair: R. Gorrie	
Credential Provided: <input type="checkbox"/> Local Certificate <input type="checkbox"/> Ont. College Certificate <input checked="" type="checkbox"/> Diploma <input type="checkbox"/> Adv. Diploma <input type="checkbox"/> Degree		
Program Intakes: <input checked="" type="checkbox"/> F <input type="checkbox"/> W <input type="checkbox"/> S Other:	Catalogue Year(s) Impacted: 2014-15	
Residency Requirement: <input checked="" type="checkbox"/> Met or <input type="checkbox"/> Not Met	Date of Last Program Review: Click here to enter a date.	
<i>I have read the reasons for the change and...</i>		<i>Signature and date</i>
Dean of Faculty (responsible for program):	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	V. Coligan Nov 27/14
Dean of Faculty (impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Dean of Faculty (impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Associate Vice President Academic (required for major changes and late DAs):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Director, Centre for Academic Excellence:	<input checked="" type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	Judy Geddes - Catalogue? - mapping?
Office of the Registrar:	<input type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	

Please answer each of the questions below, if applicable. Missing or incomplete information may delay review of the proposed changes.

1.0 Describe proposed change(s). Complete Appendix A (if necessary) and amend SDAR (Refer to Appendix C).

Review of curriculum delivery by Transport Canada audit.

2.0 Reason/Rationale for Changes

2.1 The reason for the change is based on:

- ☒ A recent program ~~review~~-audit by Transport Canada
- ☐ College Advisory Committee feedback
- ☐ Program Advisory Committee feedback
- ☐ Student feedback
- ☐ KPI results
- ☐ Accreditation or other regulatory requirements
- ☐ Shared curriculum
- ☐ Trends in the field/industry
- ☐ Other (please describe):

2.2 Does the change support the College's Strategic Framework (mission, vision, values)?

- ☒ Yes
- ☐ No (If no, please explain)

2.3 What strategic goal(s) does the proposed change support?

- ☐ Goal 1 - Enrolment growth
- ☐ Goal 2 - Flexible delivery options
- ☒ Goal 3 - Premier student experience
- ☐ Goal 4 - Sustainable College life

3.0 Students

3.1 Will the change affect the cost of the program for students?

- ☐ Yes
- ☒ No

3.2 If yes, there will be an additional cost for:

- ☐ Materials (Include details):
- ☐ Equipment (Include details):
- ☐ Other (Please describe):

4.0 Program Learning Outcomes

4.1 Will the proposed change meet the Program Vocational Learning Outcomes? (Complete Appendix B)

☒ Yes

☐ No

mapping?

4.2 Are there any implications related to progression because of pre-requisite courses (and/or co-requisite courses)?

☒ No

☐ Yes (If yes, please explain)

5.0 Relationships with Other Programs

5.1 Is this course part of any other Fanshawe College program(s)?

☒ No

☐ Yes (If yes, please identify the other program(s))

5.2 What Schools/Campuses will be impacted by the proposed change?

☐ Tourism and Hospitality

☐ Information Technology

☐ Lawrence Kinlin School of Business

☐ Health Sciences

☐ Human Services

☐ Nursing

☐ Design

☐ Language and Liberal Studies

☐ Contemporary Media

☐ Building Technology

☐ Applied Sciences and Technology

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☐ James N. Allan Campus

☐ St. Thomas Campus

5.3 Will the change affect pathway agreements (e.g., bridging, internal articulations, laddering, advance standing) with other Fanshawe programs and/or other institutions?

☒ No

☐ Yes (If yes, please explain)

5.4 What discussions have been initiated with these institutions regarding the changes?

6.0 Resource Implications of Proposed Changes

6.1 Will the proposed change have staffing implications?

- ☒ No
☐ Yes (If yes, please explain)

6.2 Will the proposed change impact any of the Enabling areas?

- ☒ No
☐ Yes (If yes, please explain)

6.3 Will the proposed change affect space and/or technology requirements?

- ☒ No
☐ Yes (If yes, please explain)

7.0 General College Requirements

7.1 Are changes consistent with Colleges policies/practices?

- ☒ Yes
☐ No (If no, please explain)

7.2 Total Program Hours after degree audit change: 2040

*regulatory
reg +*

7.2.1 Are these hours consistent with the requirements as listed below?

- ☒ Yes
☐ No (If no, please explain)

Local Certificate - 300 hours	Ontario College Certificate - 600 hours
Diploma - 1200 to 1400 hours	Advanced Diploma - 1800 to 2000 hours
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7.3 Will the program meet the General Education requirements (Policy 2-B-02) as listed below?

- ☐ No
☒ Yes

Local Certificate, Ontario College Certificate and Graduate Certificate - none required)	Diploma - 3 required (minimum of 1 must be an elective)	Advanced Diploma - 4 required (minimum of 2 must be electives)
-------------------------------------------------------------------------------------------------	----------------------------------------------------------------	-----------------------------------------------------------------------

7.4 Will the program have 25% distinct curriculum to meet the Residency Requirement of 25% credit units? Consider all pathway agreements (e.g., bridging, internal articulations, laddering, advance standing) with other Fanshawe programs and/or other institutions.

☐ No

☒ Yes

Note: In accordance with POLICY NUMBER: 2-B-17 Graduation from Approved College Programs

...to be eligible for any College Credential a student must be enrolled and complete at least 25% of that program's credit units at Fanshawe College, unless stipulated differently by other approving bodies such as the Postsecondary Education Quality Assessment Board (PEQAB).

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AVIA-1034	Aircraft Drawings/ Diagrams	60.00	3.00	Total hours/credit units change.	AVIA-1053	Aircraft Drawings/ Diagrams	30.00	1.50
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AVIA-1036	Aircraft AC Electrical Systems	90.00	4.50			Aircraft AC Electrical Systems	90.00	4.50
TOTAL		540.00	27.00	TOTAL				510.00 25.50
TOTAL				TOTAL				

Course Code	Existing DA Courses	Total Hours	Total Credits	Level 4				
TOTAL				TOTAL				
Level 5								
TOTAL				TOTAL				
Level 6								
TOTAL				TOTAL				

Degree Audit Report

Catalog: 2014/2015

Program: AAM1

Name: Aviation Technician - Aircraft Maintenance

Department: MPW - Transportation Technology

Academic Level: PS

CCD: 8 - 4AcadSem/1200-1400hrs

Credential: Ontario College Diploma

Grade Scheme: LG2

Major: AAM1 - Aviation Tech'n-Aircraft Mtnce

Div: MPW - Motive Power Division

Co-Op Indicator: N/A

Academic Program Requirement

Total Credits: 117.00

Residency Reqmt: 30.00

GPA Requirement: 2.000

Residency Reqmt GPA: 2.000

Minimum Grade: D

Academic Requirement: AAM1.14 Aviation Technician - Aircraft Maintenance

Major: AAM1

Grade Scheme: LG2

Minimum GPA: 2.000

Minimum Grade:

Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1024	Aircraft Safety/Shop Practices	30.00	1.50	
AVIA-1025	Aircraft Corrosion Control	60.00	3.00	
AVIA- 1026 1049	Aircraft Tools/Procedures	60.00 120.00	6.00 3.00	3.00
AVIA- 1027 1050	Fixed Wing Aerodynamics	90.00 60.00	3.00 4.50	4.50
AVIA- 1028 1051	Aircraft Reciprocating Engines	150.00 120.00	6.00 7.50	7.50
AVIA- 1029 1052	Aircraft Propellers	30.00 60.00	3.00 1.50	1.50
AVIA-1030	Aircraft DC Electrical Systems	90.00	4.50	

Subrequirement: Level 2

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1031	Aircraft Metallic Structure & Metallurgy	120.00	6.00	
AVIA-1032	Aircraft Hydraulics/Ctrls/Emerg Equip	150.00	7.50	
AVIA-1033	Canadian Aviation Regulations	30.00	1.50	
AVIA- 1034 1053	Aircraft Drawings/Diagrams	30.00 60.00	3.00 1.50	1.50
AVIA-1035	Rotary Wing Aerodynamics	90.00	4.50	
AVIA-1036	Aircraft AC Electrical Systems	90.00	4.50	

Subrequirement: Level 3

Gen Ed - Take a 3 credit General Education elective course

Take all of the following Mandatory Courses:

Degree Audit Report

		Total Hours	Total Credits	GE
AVIA-1037	Aircraft Management & AMO	30.00	1.50	
AVIA-1038	Aircraft Materials/Hardware	60.00	3.00	
AVIA-1039	Aircraft Non-Metallic Structure & Comp	120.00	6.00	
AVIA-1040	Aircraft Gas Turbine Engines	120.00	6.00	
AVIA-1041	Aircraft Water, Fuel & Ignition Systems	90.00	4.50	
AVIA-1042	Aircraft Airframe Electrical Systems	90.00	4.50	

Subrequirement: Level 4

Gen Ed - Take a 3 credit General Education elective course
Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
AVIA-1043	Aircraft Inspection & Records	90.00	4.50	
AVIA-1044	Advanced Maintenance Techniques	120.00	6.00	
AVIA-1045	Aircraft Turbine Engine Maintenance	90.00	4.50	
AVIA-1046	Aircraft Starting & Indications	90.00	4.50	
AVIA-1047	Avionics-Intro	120.00	6.00	

Subrequirement: Gen Ed - Electives

Take 9 General Education Credits -
Normally taken in Levels 2, 3 and 4

Subrequirement: Program Residency

Students must complete a minimum of 30 credits in this
program at Fanshawe College to meet the Program Residency
requirement and Graduate from this program

[Signature]
Approved By Chair/Manager:

[Signature]
Approved by Dean:

MPW Oct 22/14
Department and Date:

FTY Nov 27/14
Date:

General Education Approved By(as appropriate):

Date:

By my signature I indicate that I have been instructed in the courses listed below and understand that although they are of different duration than the course catalogue that these courses meet the requirements of the aviation industry and satisfy the learning outcomes as indicated on the Course Information Sheets for each course.

AVIA-1049 Aircraft Tools/Procedure
 AVIA-1050 Fixed Wing Aerodynamics
 AVIA-1051 Aircraft Recip. Engines
 AVIA-1052 Aircraft Propellers
 AVIA-1053 Aircraft Drawings and Diagrams

Name	Signed	Date
Jaewook Byeon	<i>Jaewook Byeon</i> Feb 20/2015	
Jennifer Forrester	<i>Jennifer Forrester</i> Feb 20/2015	
Joseph Carter	<i>Joseph Carter</i> Feb 20/2015	
Junha Shin	<i>Junha Shin</i> Feb 20/2015	
Kyle Best	<i>Kyle Best</i> Feb 20/2015	
Landon Ratcliffe	<i>Landon Ratcliffe</i> Feb 20/2015	
Matthew Wiley	<i>Matthew Wiley</i> ABSENT Feb 20/2015	<u>02-Mar-15</u>
Mingwei Cao	<i>Mingwei Cao</i> Feb 20/2015	
Peter Wall	<i>Peter Wall</i> Feb 20/2015	
Peyton Lawrence	<i>Peyton Lawrence</i> ABSENT Feb 20/2015	<u>02 Mar-15</u>
Romeo Reeve	<i>Romeo Reeve</i> Feb 20/2015	
Shelden Smith	<i>Shelden Smith</i> Feb 20/2015	
Timothy Carter	<i>Timothy Carter</i> Feb 20/2015	
Timothy Oates	<i>Timothy Oates</i> ABSENT Feb 20/2015	<u>march 2, 2015</u>
Timothy Thompson	<i>Tim Thompson</i> Feb 20/2015	
Tom Kolesinski	<i>Tom Kolesinski</i> Feb 20/2015	
Trevor De Decker	<i>Trevor De Decker</i> Feb 20/2015	
Tristan Brasier	<i>Tristan Brasier</i> ABSENT Feb 20/2015	<u>March 2, 2015</u>
William Gark	<i>William Gark</i> Feb 20/2015	

By my signature I indicate that I have been instructed in the courses listed below and understand that although they are of different duration than the course catalogue that these courses meet the requirements of the aviation industry and satisfy the learning outcomes as indicated on the Course Information Sheets for each course.

AVIA-1049 Aircraft Tools/Procedure
 AVIA-1050 Fixed Wing Aerodynamics
 AVIA-1051 Aircraft Recip. Engines
 AVIA-1052 Aircraft Propellers
 AVIA-1053 Aircraft Drawings and Diagrams

Name	Signed	Date
Adam Ali	<i>Adam Ali</i>	Feb 20/2015
Ali Meddoui	<i>Ali Meddoui</i>	Feb 20/2015
Anthony Wainwright	<i>Anthony Wainwright</i>	Feb 20/2015
Benjamin Murray	<i>Ben Murray</i>	Feb 20/2015
Braden Thorpe	<i>NOT HERE ABSENT</i>	Feb 20/2015
Brodie Van De Peer	<i>Brodie Van De Peer</i>	Feb 20/2015
Cameron Carter	<i>Cameron Carter</i>	Feb 20/2015
Chris Jamieson	<i>Chris Jamieson</i> <i>ABSENT</i>	Feb 20/2015 <i>Mar 2/15</i>
Christopher Cotterill	<i>Chris Cotterill</i>	Feb 20/2015
Corbin Herrfort	<i>Corbin Herrfort</i> <i>ABSENT</i>	Feb 20/2015 <i>Mar 2/15</i>
Dalton Jones	<i>Dalton Jones</i>	Feb 20/2015
Darian Byce	<i>Darian Byce</i>	Feb 20/2015
Daxesh Mistry	<i>Daxesh Mistry</i>	Feb 20/2015
Devin Empey	<i>Devin Empey</i>	Feb 20/2015
Devin McQuattie	<i>Devin McQuattie</i>	Feb 20/2015
Dylan Hoover	<i>Dylan Hoover</i>	Feb 20/2015
Eric Cornish	<i>Eric Cornish</i>	Feb 20/2015
Geordie Hock	<i>Geordie Hock</i>	Feb 20/2015
Gregory Dadson	<i>Gregory Dadson</i> <i>ABSENT</i>	Feb 20/2015 <i>Mar 2/2015</i>
Hussein Ince	<i>Hussein Ince</i>	Feb 20/2015

PROGRAM MAPPING (Name of Program)													
Aviation Technician - Aircraft Maintenance	LEVEL ONE							LEVEL TWO					
PROGRAM VOCATIONAL LEARNING OUTCOMES	AVIA-1049 Aircraft Tools/Procedure	AVIA-1050 Fixed Wing Aerodynamics	AVIA-1051 Aircraft Recip. Engines	AVIA-1052 Aircraft Propellers				AVIA-1053 Aircraft Drawings and Diagrams					# OF COURSES EVALUATING THE OUTCOME
1 - Introductory													
2 - Intermediate													
3 - Advanced													
The graduate has reliably demonstrated the ability to: (Source: MTCU Code)MTCU code 56600													
Inspect and service aircraft systems on large or small, fixed or rotary wing aircraft utilizing current and relevant theories of aerodynamics; aircraft; and mechanical, electrical, electronic, and engineering principles.		1		3				1					3
Inspect, test, troubleshoot, service, repair and overhaul aircraft in a manner that ensures adherence to Canadian aviation and company regulations of aircraft safety and airworthiness.		2	2	2									3
Evaluate fixed wing and rotary aircraft structures including transparencies, materials and fasteners, furnishings and fabric coverings, and lines and conduits, to complete maintenance, assembly, fabrication and repair work on large and small aircraft.		2	2	2									3
Perform scheduled and unscheduled inspections on aircraft systems, structures, instruments, and related components to ensure they are in proper working order and meet standards of performance and safety.		1	3	3									3
Install aircraft engines, parts, components and structures as part of routine and unscheduled maintenance and replacement tasks.		2	3	2									3
Diagnose malfunctions or other problems in aircraft systems, structures, instruments, and related components using technical manuals, drawings, blueprints, and standards of performance and		2	2	2									3
Complete structural and non-structural repairs and modifications by following applicable procedures and safety precautions, and meeting industry standards.	1		2	2									3
Perform component wear and fatigue analysis using appropriate measuring devices to determine necessary repair or replacement tasks in order to maintain the aircraft's airworthiness and safety.	1	2	2	2				2					5
Perform service, maintenance, repair, reconditioning, and modification procedures on aircraft systems, structures, instruments, and related components to maintain aircraft safety and airworthiness.	2	2	3	2									4
0. Dismantle airframes, aircraft engines and other systems for repair and overhaul.		2	3	2									3
1. Interpret written instructions, schematics, manufacturer's specifications, technical drawings, manuals, and computer based information correctly, effectively, and efficiently while performing routine and unscheduled tasks.		3	3	2				3					4
2. Maintain detailed inspection, repair, maintenance, and certification records and reports to meet industry regulations and logbook requirements.		3	3	3				2					4
3. Complete all work in a manner that enhances health, wellness, and personal wellbeing; reduces the risk of occupational and workplace injury; meets relation health, safety and environmental legislation; and conforms to occupational health and safety	2	2	2	2									4
TOTAL # OF OUTCOMES EVALUATED BY EACH COURSE	4	12	12	13	0	0	0	4	0	0	0	0	
/ = Vocational Courses E = Essential Employability Skills Courses													
M = General Education (mandatory) G = General Education (elective)													
NB - Only indicate the outcomes that are Taught & Evaluated (TE or TRE) in a course													
PROGRAM COORDINATOR: Matthew Crawford													
ACADEMIC CHAIR:													
Date Completed: Jan 29/15													
Professor: Matthew Crawford													

CAR 566 ref.	Topic		1st Unit	2nd Unit	3rd Unit	Comp. Level #	Vocational Learning Outcomes
	Chapter 566 appendix C – Part 2		-	-	-	-	-
1.0 GENERAL			-	-	-	-	-
	Identify:		-	-	-	-	-
1 0 1	the different classes of fires and suitable extinguishers.	AVIA-1024				1	Identify the different classes of fires and suitable extinguishers.
	Explain:		-	-	-	-	-
1 0 2	the legal and moral responsibilities of maintenance technicians and AMEs.	AVIA-1024				2	Explain the legal and moral responsibilities of maintenance technicians and AMEs.
	Perform:		-	-	-	-	-
1 0 3	human factors in maintenance.	AVIA-1024				2	Explain human factors in maintenance.
	Perform:		-	-	-	-	-
1 0 4	tasks utilizing health and safety practices, including handling of chemicals, metals, pyrotechnics and hazardous materials, environmental considerations, workplace hazardous materials information system or equivalent.	AVIA-1024				3	Perform tasks utilizing health and safety practices, including handling of chemicals, metals, pyrotechnics and hazardous materials, environmental considerations, workplace hazardous materials information system or equivalent.
1 0 5	tasks extracting information from technical drawings including ATA system.	AVIA 1053				3	Perform tasks extracting information from technical drawings including ATA system.
2.0 HAND TOOLS/PRECISION INSTRUMENTS			-	-	-	-	-
	Perform:		-	-	-	-	-
2 0 1	tasks utilizing the proper selection and use of hand and power tools.	AVIA 1049	AVIA-1031	AVIA-1039		3	Perform tasks utilizing the proper selection and use of hand and power tools.
3.0 METALLURGY			-	-	-	-	-
	Identify:		-	-	-	-	-
3 0 1	the types of corrosion.	AVIA-1025				1	Identify the types of corrosion.
	Explain:		-	-	-	-	-
3 0 2	the hardness testing process.	AVIA-1031				2	Explain the hardness testing process.
3 0 3	relevant manufacturing treatment processes of aircraft metals.	AVIA-1031				2	Explain relevant manufacturing treatment processes of aircraft metals.
3 0 4	the fundamentals of NDT processes including, visual inspection, liquid penetrant inspection, ultrasonic inspection, eddy current inspection, magnetic particle inspection, radiography etc.	AVIA-1025				2	Explain the fundamentals of NDT processes including, visual inspection, liquid penetrant inspection, ultrasonic inspection, eddy current inspection, magnetic particle inspection, radiography etc.
3 0 5	the methods of corrosion treatment and prevention.	AVIA-1025				2	Explain the methods of corrosion treatment and prevention.
3 0 6	the inspection processes for welds.	AVIA 1049	AVIA-1031			2	Explain the inspection processes for welds.
3 0 7	the inspection process for bonds.	AVIA 1049				2	Explain the inspection process for bonds.
	Perform:		-	-	-	-	-
3 0 8	tasks identifying the types, properties and coding of aircraft metals.	AVIA-1031				3	Perform tasks identifying the types, properties and coding of aircraft metals.
3 0 9	visual inspection and liquid penetrant inspection.	AVIA-1025				3	Perform visual inspection and liquid penetrant inspection.
4.0 AIRCRAFT SERVICING			-	-	-	-	-
	Explain:		-	-	-	-	-
4 0 1	servicing of aircraft systems such as water, waste, oxygen, etc.	AVIA-1032	AVIA-1041	AVIA-1046		2	Explain servicing of aircraft systems such as water, waste, oxygen, etc.
4 0 2	the classifications, functions principles and properties of lubricants including: engine oil, grease and hydraulic fluids.	AVIA 1051	AVIA-1032	AVIA-1046		2	Explain the classifications, functions principles and properties of lubricants including: engine oil, grease and hydraulic fluids.
4 0 3	aircraft deicing procedures.	AVIA-1032				2	Explain aircraft deicing procedures.
4 0 4	operating procedures and safety precautions of ground support equipment required to service the aircraft.	AVIA-1046				2	Explain operating procedures and safety precautions of ground support equipment required to service the aircraft.
4 0 5	aircraft grooming procedures and precautions.	AVIA-1025				2	Explain aircraft grooming procedures and precautions.
4 0 6	aircraft storage procedures.	AVIA-1035	AVIA-1039	AVIA-1043		2	Explain aircraft storage procedures.
	Perform:		-	-	-	-	-
4 0 7	a fuel contamination check.	AVIA-1041				3	Perform a fuel contamination check.
4 0 8	tire servicing and inflation.	AVIA-1032				3	Perform tire servicing and inflation.
4 0 9	servicing of aircraft main batteries.	AVIA-1030				3	Perform servicing of aircraft main batteries.
4 0 10	servicing of lubrication, fuel, oil and hydraulic systems.	AVIA 1051	AVIA-1032	AVIA-1046		3	Perform servicing of lubrication, fuel, oil and hydraulic systems.
4 0 11	Standard ground handling practices.	AVIA-1043	AVIA-1046			3	Perform Standard ground handling practices.
4 0 12	Jacking of an aircraft.	AVIA-1032	AVIA-1043			3	Perform Jacking of an aircraft.
5.0 APPROVED PARTS			-	-	-	-	-
	Identify:		-	-	-	-	-
5 0 1	aircraft hardware using AN, MS, NAS parts systems.	AVIA-1031	AVIA-1038			1	Identify aircraft hardware using AN, MS, NAS parts systems.
	Explain:		-	-	-	-	-
5 0 2	the application of metric and British unified systems to aircraft hardware.	AVIA-1038				2	Explain the application of metric and British unified systems to aircraft hardware.
5 0 3	the needs and rationale for aircraft specifications such as MIL, NAS.	AVIA-1038				2	Explain the needs and rationale for aircraft specifications such as MIL, NAS.
5 0 4	the inventory control system including traceability, requisitioning, quarantine and bonded stores.	AVIA-1038				2	Explain the inventory control system including traceability, requisitioning, quarantine and bonded stores.
	Perform:		-	-	-	-	-
5 0 5	installation and securing of standard hardware and connectors.	AVIA-1031	AVIA-1038	AVIA-1030		3	Perform installation and securing of standard hardware and connectors.
6.0 AERODYNAMICS			-	-	-	-	-
6.1 Fixed Wing Aircraft			-	-	-	-	-
	Explain:		-	-	-	-	-
6 1 1	the theory of flight, relative motion, dynamic stability, standard atmosphere, fluid dynamics, lift, drag, thrust and weight, forces and balance, stalling/landing speeds, speed of sound, aerodynamic loads, and high speed flight	AVIA 1050				2	Explain the theory of flight, relative motion, dynamic stability, standard atmosphere, fluid dynamics, lift, drag, thrust and weight, forces and balance, stalling/landing speeds, speed of sound, aerodynamic loads, and high speed flight
6 1 2	the purpose of flight controls including primary, secondary, and auxiliary controls, lift and anti-lift devices.	AVIA 1050				2	Explain the purpose of flight controls including primary, secondary, and auxiliary controls, lift and anti-lift devices.
6.2 Rotary Wing Aircraft			-	-	-	-	-
	Explain:		-	-	-	-	-
6 2 1	theory of flight applicable to rotary wing including:	AVIA-1035				2	Explain theory of flight applicable to rotary wing including:
	coriolis effect	AVIA-1035				2	Explain coriolis effect
	retreating blade stall	AVIA-1035				2	Explain retreating blade stall
	auto-rotational characteristics	AVIA-1035				2	Explain auto-rotational characteristics
	transverse flow	AVIA-1035				2	Explain transverse flow
	dissymmetry of lift	AVIA-1035				2	Explain dissymmetry of lift
	ground effect	AVIA-1035				2	Explain ground effect
6.3 Fixed Wing Controls and Rigging			-	-	-	-	-
	Identify:		-	-	-	-	-
6 3 1	types of flight controls and explain features and functions of flight control systems.	AVIA 1050				1	Identify types of flight controls and explain features and functions of flight control systems.
	Explain:		-	-	-	-	-
6 3 2	mechanical flight control system and components.	AVIA 1050				2	Explain mechanical flight control system and components.
6 3 3	servo powered flight control system and components.	AVIA 1050				2	Explain servo powered flight control system and components.
6 3 4	cables, fittings and repair of associated rigging hardware.	AVIA 1050				2	Explain cables, fittings and repair of associated rigging hardware.
6 3 5	incidence, symmetry checks and adjustments.	AVIA 1050				2	Explain incidence, symmetry checks and adjustments.

6	3	6	the purpose and principles of flight control artificial feel/feedback systems.	AVIA 1050			2	Explain the purpose and principles of flight control artificial feel/feedback systems.
6	3	7	the systems which modify flight control travel due to altitude, velocity or other factors e.g. rudder travel limitation, aileron lockout, lift dump.	AVIA 1050			2	Explain the systems which modify flight control travel due to altitude, velocity or other factors e.g. rudder travel limitation, aileron lockout, lift dump.
			Perform:	-	-	-	-	-
6	3	8	inspection of cable and control rod type flight control system.	AVIA 1050		AVIA-1044	3	Perform inspection of cable and control rod type flight control system.
6	3	9	rigging of cable operated primary flight control system.	AVIA 1050	AVIA-1044		3	Perform rigging of cable operated primary flight control system.
6	3	10	a cable repair.	AVIA-1031			3	Perform a cable repair.
			6.4 Rotary Wing Controls and Rigging	-	-	-	-	-
			Explain:	-	-	-	-	-
6	4	1	elements of the drive train including:	AVIA-1035			2	Explain elements of the drive train including:
			transmission	AVIA-1035			2	Explain transmission
			clutches and freewheeling	AVIA-1035			2	Explain clutches and freewheeling
			drive shaft systems	AVIA-1035			2	Explain drive shaft systems
			gearboxes (intermediate and tail rotor)	AVIA-1035			2	Explain gearboxes (intermediate and tail rotor)
			ducted fan systems including NOTAR and Fenestron	AVIA-1035			2	Explain ducted fan systems including NOTAR and Fenestron
			gear construction, installation, types, ratios, patterns, lubrication and backlash	AVIA-1035			2	Explain gear construction, installation, types, ratios, patterns, lubrication and backlash
			bearings and seals (friction, anti-friction, elastomeric)	AVIA-1035			2	Explain bearings and seals (friction, anti-friction, elastomeric)
			rotor head types and design including:	AVIA-1035			2	Explain rotor head types and design including:
			rigid	AVIA-1035			2	Explain rigid
			semi-rigid	AVIA-1035			2	Explain semi-rigid
			fully articulated	AVIA-1035			2	Explain fully articulated
			rotor blade design, construction and types	AVIA-1035			2	Explain rotor blade design, construction and types
6	4	2	the various fundamentals of flight control systems including:	AVIA-1035			2	Explain the various fundamentals of flight control systems including:
			rotating controls	AVIA-1035			2	Explain rotating controls
			non rotating controls	AVIA-1035			2	Explain non rotating controls
			forced trim	AVIA-1035			2	Explain forced trim
			forced gradient	AVIA-1035			2	Explain forced gradient
			swash plate	AVIA-1035			2	Explain swash plate
			spider system	AVIA-1035			2	Explain spider system
			servo tabs	AVIA-1035			2	Explain servo tabs
6	4	3	the various fundamentals of flight control rigging including:	AVIA-1035			2	Explain the various fundamentals of flight control rigging including:
			cyclic rigging	AVIA-1035			2	Explain cyclic rigging
			collective rigging	AVIA-1035			2	Explain collective rigging
			anti-torque devices	AVIA-1035			2	Explain anti-torque devices
			elevators	AVIA-1035			2	Explain elevators
			correlation devices	AVIA-1035			2	Explain correlation devices
			droop compensators	AVIA-1035			2	Explain droop compensators
6	4	4	the fundamentals and effects of vibration.	AVIA-1035			2	Explain the fundamentals and effects of vibration.
6	4	5	vibration types and causes including:	AVIA-1035			2	Explain vibration types and causes including:
			vertical	AVIA-1035			2	Explain vertical
			lateral	AVIA-1035			2	Explain lateral
			low frequency	AVIA-1035			2	Explain low frequency
			medium frequency	AVIA-1035			2	Explain medium frequency
			high frequency	AVIA-1035			2	Explain high frequency
			harmonics	AVIA-1035			2	Explain harmonics
			nodes	AVIA-1035			2	Explain nodes
6	4	6	vibration canceling devices including:	AVIA-1035			2	Explain vibration canceling devices including:
			dampers	AVIA-1035			2	Explain dampers
			bifilar	AVIA-1035			2	Explain bifilar
6	4	7	landing gear types and systems including:	AVIA-1035			2	Explain landing gear types and systems including:
			skids	AVIA-1035			2	Explain skids
			floats	AVIA-1035			2	Explain floats
			wheels	AVIA-1035			2	Explain wheels
			pop out floats	AVIA-1035			2	Explain pop out floats
			retractable gear	AVIA-1035	AVIA-1032		2	Explain retractable gear
6	4	8	rotor tracking and balancing requirements, analysis and rectification.	AVIA-1035			2	Explain rotor tracking and balancing requirements, analysis and rectification.
6	4	9	autorotational RPM adjustments.	AVIA-1035			2	Explain autorotational RPM adjustments.
6	4	10	inspection requirements including:	AVIA-1035			2	Explain inspection requirements including:
			sudden stoppage	AVIA-1035			2	Explain sudden stoppage
			hard landing	AVIA-1035			2	Explain hard landing
			overspeed	AVIA-1035			2	Explain overspeed
			over torque	AVIA-1035			2	Explain over torque
			periodic inspections	AVIA-1035			2	Explain periodic inspections
6	4	11	operational safety practices including approaching and exiting a running helicopter.	AVIA-1035			2	Explain operational safety practices including approaching and exiting a running helicopter.
6	4	12	ground crew responsibilities and precautions applicable to slinging external loads.	AVIA-1035			2	Explain ground crew responsibilities and precautions applicable to slinging external loads.
			Perform:	-	-	-	-	-
6	4	13	alignment and static balance procedures for a semi-rigid rotor head.	AVIA-1035			3	Perform alignment and static balance procedures for a semi-rigid rotor head.
6	4	14	tracking and dynamic balance of a main and tail rotor system using a simulator	AVIA-1035			3	Perform tracking and dynamic balance of a main and tail rotor system using a simulator
6	4	15	the testing, troubleshooting, repair, adjustment, removal and replacement of dynamic components	AVIA-1035			3	Perform the testing, troubleshooting, repair, adjustment, removal and replacement of dynamic components
			7.0 SHEET METAL	-	-	-	-	-
			Explain:	-	-	-	-	-
7	0	1	the difference between a structural and non-structural repair.	AVIA-1031	AVIA-1039	AVIA-1043	2	Explain the difference between a structural and non-structural repair.
7	0	2	the application and installation/removal of special fasteners.	AVIA-1031	AVIA-1038		2	Explain the application and installation/removal of special fasteners.
7	0	3	the requirements for scratch inspection.	AVIA-1031			2	Explain the requirements for scratch inspection.
7	0	4	the purpose and use of sealant.	AVIA-1025			2	Explain the purpose and use of sealant.
			Perform:	-	-	-	-	-
7	0	5	installation, inspection and removal of solid rivets.	AVIA-1031	AVIA-1038		3	Perform installation, inspection and removal of solid rivets.
7	0	6	installation and removal of standard fasteners.	AVIA-1031	AVIA-1038		3	Perform installation and removal of standard fasteners.
7	0	7	sheet metal repairs including cutting, bending, forming and fabricating.	AVIA-1031			3	Perform sheet metal repairs including cutting, bending, forming and fabricating.
			8.0 AIRCRAFT STRUCTURES	-	-	-	-	-
			Identify:	-	-	-	-	-
8	0	1	structural members and stress involved in floats, hulls, skis, stabilizers, wings, engine mounts, cowlings and fuselages.	AVIA-1031			1	Identify structural members and stress involved in floats, hulls, skis, stabilizers, wings, engine mounts, cowlings and fuselages.
			Explain:	-	-	-	-	-
8	0	2	types of primary aircraft structures.	AVIA-1031			2	Explain types of primary aircraft structures.

8	0	3	the fabric surfaces and wood components including inspection, materials, process, fabric repairs, wood types, uses, and repair.	AVIA-1039			2	Explain the fabric surfaces and wood components including inspection, materials, process, fabric repairs, wood types, uses, and repair.
9.0 PLASTICS AND COMPOSITES								
			Explain:	-	-	-	-	-
9	0	1	reinforcement fibers, matrix materials, core materials, manufacturing techniques composite safety, methods of curing, pre-pregs, temperature and pressure applications.	AVIA-1039			2	Explain reinforcement fibers, matrix materials, core materials, manufacturing techniques composite safety, methods of curing, pre-pregs, temperature and pressure applications.
9	0	2	inspection, damage assessment and repair procedures.	AVIA-1039			2	Explain inspection, damage assessment and repair procedures.
			Perform:	-	-	-	-	-
9	0	3	A repair using the following procedures:	AVIA-1039			3	Perform A repair using the following procedures:
			wet lay-up	AVIA-1039			3	Perform wet lay-up
			core repair.	AVIA-1039			3	Perform core repair.
10.0 WINDOWS AND LENSES								
			Explain:	-	-	-	-	-
10	0	1	the construction of windows and lenses.	AVIA-1039			2	Explain the construction of windows and lenses.
10	0	2	inspection, repair, servicing and installation of windows and lenses.	AVIA-1039			2	Explain inspection, repair, servicing and installation of windows and lenses.
10	0	3	damage assessment of windows and lenses.	AVIA-1039			2	Explain damage assessment of windows and lenses.
10	0	4	handling and storage of windows and lenses.	AVIA-1039			2	Explain handling and storage of windows and lenses.
11.0 PISTON ENGINES								
11.1 Basics								
			Explain:	-	-	-	-	-
11	1	1	the calculation of energy, work and horsepower.	AVIA 1051			2	Explain the calculation of energy, work and horsepower.
11	1	2	the two stroke cycle and the Otto cycle.	AVIA 1051			2	Explain the two stroke cycle and the Otto cycle.
11	1	3	piston engine classification terminology (e.g. TSIO-520, R985).	AVIA 1051			2	Explain piston engine classification terminology (e.g. TSIO-520, R985).
11.2 Cooling and Lubrication of Engines								
			Explain:	-	-	-	-	-
11	2	1	the purpose and methods of engine cooling.	AVIA 1051			2	Explain the purpose and methods of engine cooling.
11	2	2	the functions, principles and properties of lubricating oil.	AVIA 1051			2	Explain the functions, principles and properties of lubricating oil.
11	2	3	lubrication systems including oil dilution and cold weather operations.	AVIA 1051			2	Explain lubrication systems including oil dilution and cold weather operations.
			Perform:	-	-	-	-	-
11	2	4	the selection of the appropriate lubricants.	AVIA 1051			3	Perform the selection of the appropriate lubricants.
11.3 Component Parts of a Reciprocating Engine Assembly								
			Explain:	-	-	-	-	-
11	3	1	the purpose of parts including the following:	AVIA 1051			2	Explain the purpose of parts including the following:
			crankshaft	AVIA 1051			2	Explain crankshaft
			connecting rods	AVIA 1051			2	Explain connecting rods
			bearings	AVIA 1051			2	Explain bearings
			pistons	AVIA 1051			2	Explain pistons
			cylinders	AVIA 1051			2	Explain cylinders
			accessory/propeller gearing	AVIA 1051			2	Explain accessory/propeller gearing
			valves and valve train	AVIA 1051			2	Explain valves and valve train
			crankcase	AVIA 1051			2	Explain crankcase
11	3	2	the procedure for lapping valves and seats, replacing bushings, removing nicks, burrs, scratches, scores, and replacing damaged studs.	AVIA 1051			2	Explain the procedure for lapping valves and seats, replacing bushings, removing nicks, burrs, scratches, scores, and replacing damaged studs.
			Perform:	-	-	-	-	-
11	3	3	disassembly, cleaning, inspection, measuring and reassembly of the engine.	AVIA 1051			3	Perform disassembly, cleaning, inspection, measuring and reassembly of the engine.
11.4 Carburetion Principles								
			Explain:	-	-	-	-	-
11	4	1	characteristics of fuel and fuel/air metering systems	AVIA 1051			2	Explain characteristics of fuel and fuel/air metering systems
11	4	2	carburetion principles and components as they apply to float type and pressure injection carburetors, single and multi-point fuel injection systems.	AVIA 1051			2	Explain carburetion principles and components as they apply to float type and pressure injection carburetors, single and multi-point fuel injection systems.
11	4	3	induction system principles and components as they apply to normally aspirated, supercharged and turbocharged engines.	AVIA 1051	AVIA-1041		2	Explain induction system principles and components as they apply to normally aspirated, supercharged and turbocharged engines.
11	4	4	the operation of turbocharger control systems.	AVIA 1051	AVIA-1041		2	Explain the operation of turbocharger control systems.
11.5 Ignition Systems								
			Explain:	-	-	-	-	-
11	5	1	the principles of operation and identify the components of reciprocating engine ignition systems.	AVIA 1051			2	Explain the principles of operation and identify the components of reciprocating engine ignition systems.
			Perform:	-	-	-	-	-
11	5	2	the timing and installation of a magneto and ignition harness.	AVIA 1051	AVIA-1041		3	Perform the timing and installation of a magneto and ignition harness.
11	5	3	the inspection, servicing and testing of magneto ignition system components.	AVIA 1051	AVIA-1041		3	Perform the inspection, servicing and testing of magneto ignition system components.
11.6 Installing, Testing, Troubleshooting Engines								
			Explain:	-	-	-	-	-
11	6	1	run-in procedures including testing and troubleshooting.	AVIA 1051			2	Explain run-in procedures including testing and troubleshooting.
11	6	2	the purpose and procedure for engine inhibiting.	AVIA 1051			2	Explain the purpose and procedure for engine inhibiting.
			Perform:	-	-	-	-	-
11	6	3	engine removal and installation including installation of accessories and component systems.	AVIA 1051			3	Perform engine removal and installation including installation of accessories and component systems.
11	6	4	reciprocating engine run-up.	AVIA 1051	AVIA-1041		3	Perform reciprocating engine run-up.
12.0 TURBINE ENGINES								
12.1 Basics								
			Explain:	-	-	-	-	-
12	1	1	development, fundamentals and principles of operation of turbine engines.	AVIA-1040			2	Explain development, fundamentals and principles of operation of turbine engines.
12	1	2	engine design and construction pertaining to:	AVIA-1040			2	Explain engine design and construction pertaining to:
			inlet ducts	AVIA-1040			2	Explain inlet ducts
			compressors	AVIA-1040			2	Explain compressors
			bleed valves	AVIA-1040			2	Explain bleed valves
			diffusers	AVIA-1040			2	Explain diffusers
			vane controllers	AVIA-1040			2	Explain vane controllers
			combustion section	AVIA-1040			2	Explain combustion section
			turbines	AVIA-1040			2	Explain turbines
			exhaust section	AVIA-1040	AVIA 1035		2	Explain exhaust section
			gear boxes	AVIA-1040	AVIA 1035		2	Explain gear boxes
			bearings and seals	AVIA-1040	AVIA 1035		2	Explain bearings and seals
			engine mounts	AVIA-1040	AVIA 1035		2	Explain engine mounts
12	1	3	factors affecting thrust/torque.	AVIA-1040			2	Explain factors affecting thrust/torque.

12	1	4	the mathematics and physics relating to thrust production including the brayton cycle and thrust calculations.	AVIA-1040			2	Explain the mathematics and physics relating to thrust production including the brayton cycle and thrust calculations.
12	1	5	the purpose and advantages of modular construction.	AVIA-1040	AVIA-1035		2	Explain the purpose and advantages of modular construction.
12	1	6	common designs of turbine engines including:	AVIA-1040			2	Explain common designs of turbine engines including:
			torque producing engines	AVIA-1040			2	Explain torque producing engines
			thrust producing engines	AVIA-1040			2	Explain thrust producing engines
			turboshaft and turboprop	AVIA-1040	AVIA-1035		2	Explain turboshaft and turboprop
			turbojet and turbofan	AVIA-1040			2	Explain turbojet and turbofan
12	1	7	the principles of noise suppression techniques.	AVIA-1040			2	Explain the principles of noise suppression techniques.
12	1	8	turbine engine systems including fuel, lubrication, ignition, air, exhaust.	AVIA-1040			2	Explain turbine engine systems including fuel, lubrication, ignition, air, exhaust.
12	1	9	common turbine engine terminology and acronyms	AVIA-1040			2	Explain common turbine engine terminology and acronyms
			12.2 Fuel and Control					
			Explain:					
12	2	1	Explain fuel systems including:	AVIA-1040	AVIA-1045		2	Explain Explain fuel systems including:
			electronic fuel control	AVIA-1040	AVIA-1045		2	Explain electronic fuel control
			hydro-mechanical fuel control	AVIA-1040	AVIA-1045		2	Explain hydro-mechanical fuel control
			pneumatic fuel control overspeed governors	AVIA-1040	AVIA-1045		2	Explain pneumatic fuel control overspeed governors
			fuel manifolds and nozzles	AVIA-1040	AVIA-1045		2	Explain fuel manifolds and nozzles
			fuel heater	AVIA-1040	AVIA-1045		2	Explain fuel heater
			fuel filter	AVIA-1040	AVIA-1045		2	Explain fuel filter
			fuel system indication (flow pressure and temperature)	AVIA-1040	AVIA-1045		2	Explain fuel system indication (flow pressure and temperature)
			Perform:					
12	2	2	fuel nozzle inspection, servicing, testing and safety precautions.	AVIA-1040			3	Perform fuel nozzle inspection, servicing, testing and safety precautions.
			12.3 Ignition					
			Explain:					
12	3	1	types and operation of turbine engine ignition systems and their components including:	AVIA-1040	AVIA-1041		2	Explain types and operation of turbine engine ignition systems and their components including:
			low tension (glow plugs)	AVIA-1040	AVIA-1041		2	Explain low tension (glow plugs)
			high tension (capacitive discharge)	AVIA-1040	AVIA-1041		2	Explain high tension (capacitive discharge)
			auto re-light	AVIA-1040	AVIA-1041		2	Explain auto re-light
12	3	2	turbine engine ignition system safety precautions.	AVIA-1040	AVIA-1041		2	Explain turbine engine ignition system safety precautions.
			Perform:					
12	3	3	ignition systems servicing and inspection procedures.	AVIA-1040	AVIA-1041		3	Perform ignition systems servicing and inspection procedures.
			12.4 Starting					
			Explain:					
12	4	1	design and components of starting systems.	AVIA-1040	AVIA-1045		2	Explain design and components of starting systems.
12	4	2	the operation of various turbine engine starters including air turbine starters, electrical starters, (motor and starter-generator).	AVIA-1040	AVIA-1045		2	Explain the operation of various turbine engine starters including air turbine starters, electrical starters, (motor and starter-generator).
12	4	3	inspection and servicing procedures for starting systems.	AVIA-1040	AVIA-1045		2	Explain inspection and servicing procedures for starting systems.
12	4	4	the operation of an auto-start system.	AVIA-1040	AVIA-1045		2	Explain the operation of an auto-start system.
			Perform:					
12	4	5	the inspection and servicing of an electrical turbine engine starter.	AVIA-1040	AVIA-1045		3	Perform the inspection and servicing of an electrical turbine engine starter.
			12.5 Engine Controls					
			Explain:					
12	5	1	rigging requirements for gas turbine controls and systems.	AVIA-1040	AVIA-1045		2	Explain rigging requirements for gas turbine controls and systems.
12	5	2	adjustments of fuel controls including:	AVIA-1040	AVIA-1045		2	Explain adjustments of fuel controls including:
			acceleration/deceleration check	AVIA-1040	AVIA-1045		2	Explain acceleration/deceleration check
			minimum flow	AVIA-1040	AVIA-1045		2	Explain minimum flow
			maximum speed	AVIA-1040	AVIA-1045		2	Explain maximum speed
			idle speed	AVIA-1040	AVIA-1045		2	Explain idle speed
			part power trim check	AVIA-1040	AVIA-1045		2	Explain part power trim check
			shut off	AVIA-1040	AVIA-1045		2	Explain shut off
12	5	3	mechanical, electronic interface, Full Authority Digital Engine Control (FADEC) systems.	AVIA-1040	AVIA-1045		2	Explain mechanical, electronic interface, Full Authority Digital Engine Control (FADEC) systems.
			12.6 Lubrication					
			Explain:					
12	6	1	types and requirements of turbine oil.	AVIA-1040			2	Explain types and requirements of turbine oil.
12	6	2	engine lubrication system principles and component operation including:	AVIA-1040			2	Explain engine lubrication system principles and component operation including:
			wet sump	AVIA-1040			2	Explain wet sump
			dry sump	AVIA-1040			2	Explain dry sump
			scavenge pumps	AVIA-1040			2	Explain scavenge pumps
			pressure pumps	AVIA-1040			2	Explain pressure pumps
			oil filters	AVIA-1040			2	Explain oil filters
			bearings and seals	AVIA-1040			2	Explain bearings and seals
			oil pressure regulator	AVIA-1040			2	Explain oil pressure regulator
			air oil separators	AVIA-1040			2	Explain air oil separators
			oil coolers	AVIA-1040			2	Explain oil coolers
			oil jets	AVIA-1040			2	Explain oil jets
12	6	3	contamination monitoring system operation principles including:	AVIA-1040	AVIA-1045		2	Explain contamination monitoring system operation principles including:
			chip detectors	AVIA-1040	AVIA-1045		2	Explain chip detectors
			filter	AVIA-1040	AVIA-1045		2	Explain filter
			spectrometric oil analysis program (SOAP)	AVIA-1040	AVIA-1045		2	Explain spectrometric oil analysis program (SOAP)
			12.7 Exhaust					
			Explain:					
12	7	1	types, operation and control of thrust reverse systems including hot and cold stream.	AVIA-1040			2	Explain types, operation and control of thrust reverse systems including hot and cold stream.
12	7	2	principles of thrust vectoring systems.	AVIA-1040			2	Explain principles of thrust vectoring systems.
12	7	3	principles and engine trimming associated with exhaust ducts.	AVIA-1040			2	Explain principles and engine trimming associated with exhaust ducts.
			12.8 Air					
			Explain:					
12	8	1	general air systems of turbine engines including the following:	AVIA-1040			2	Explain general air systems of turbine engines including the following:
			anti-ice air	AVIA-1040			2	Explain anti-ice air
			de-ice air	AVIA-1040			2	Explain de-ice air
			bleed valves	AVIA-1040			2	Explain bleed valves
			customer bleed air	AVIA-1040			2	Explain customer bleed air
			case cooling/heating (clearance control)	AVIA-1040			2	Explain case cooling/heating (clearance control)
			control air	AVIA-1040			2	Explain control air
			temperature and pressure regulation	AVIA-1040			2	Explain temperature and pressure regulation

			filters	AVIA-1040			2	Explain filters
			12.9 Engine Indicating Systems	-	-	-	-	-
			Explain:	-	-	-	-	-
12	9	1	principles and operation of engine indicating systems including:	AVIA-1040	AVIA-1045		2	Explain principles and operation of engine indicating systems including:
			speed indication	AVIA-1040	AVIA-1045		2	Explain speed indication
			temperature indication	AVIA-1040	AVIA-1045		2	Explain temperature indication
			pressure indication	AVIA-1040	AVIA-1045		2	Explain pressure indication
			flow metering systems	AVIA-1040	AVIA-1045		2	Explain flow metering systems
			quantity indication (oil quantity)	AVIA-1040	AVIA-1045		2	Explain quantity indication (oil quantity)
			fault detection (chip detector, filter bypass)	AVIA-1040	AVIA-1045		2	Explain fault detection (chip detector, filter bypass)
			power indication systems engine pressure ratio (EPR)	AVIA-1040	AVIA-1045		2	Explain power indication systems engine pressure ratio (EPR)
			torque indication	AVIA-1040	AVIA-1045		2	Explain torque indication
			status enunciators	AVIA-1040	AVIA-1045		2	Explain status enunciators
			built in test equipment (BITE) system	AVIA-1040	AVIA-1045		2	Explain built in test equipment (BITE) system
			vibration indication	AVIA-1040	AVIA-1045		2	Explain vibration indication
			12.10 Gear Box	-	-	-	-	-
			Explain:	-	-	-	-	-
12	10	1	purpose, function and types of engine gear boxes including:	AVIA-1040	AVIA-1045		2	Explain purpose, function and types of engine gear boxes including:
			accessories and accessory drives	AVIA-1040	AVIA-1045		2	Explain accessories and accessory drives
			gear reduction systems	AVIA-1040	AVIA-1045		2	Explain gear reduction systems
			attachment devices	AVIA-1040	AVIA-1045		2	Explain attachment devices
			fault detection analysis -chip detectors and filter attachment	AVIA-1040	AVIA-1045		2	Explain fault detection analysis -chip detectors and filter attachment
			torque measurement system	AVIA-1040	AVIA-1045		2	Explain torque measurement system
			gear types	AVIA-1040	AVIA-1045		2	Explain gear types
			12.11 Engine Water Injection	-	-	-	-	-
			Explain:	-	-	-	-	-
12	11	1	the purpose and operation of water methanol injection systems.	AVIA-1040			2	Explain the purpose and operation of water methanol injection systems.
			12.12 Inspection/Service	-	-	-	-	-
			Explain:	-	-	-	-	-
12	12	1	handling and safety precautions.	AVIA-1040			2	Explain handling and safety precautions.
12	12	2	the purpose and procedures for trend monitoring and power checks.	AVIA-1040			2	Explain the purpose and procedures for trend monitoring and power checks.
12	12	3	fundamentals of vibration analysis.	AVIA-1040			2	Explain fundamentals of vibration analysis.
12	12	4	turbine engine inspection procedures including:	AVIA-1040	AVIA-1045		2	Explain turbine engine inspection procedures including:
			hot end inspection	AVIA-1040	AVIA-1045		2	Explain hot end inspection
			borescope inspection.	AVIA-1040	AVIA-1045		2	Explain borescope inspection.
12	12	5	the engine start and shut down procedure.	AVIA-1040	AVIA-1045		2	Explain the engine start and shut down procedure.
12	12	6	requirements and procedures for compressor wash.	AVIA-1040	AVIA-1045		2	Explain requirements and procedures for compressor wash.
12	12	7	safety precautions and hazards while ground running including:	AVIA-1040	AVIA-1045		2	Explain safety precautions and hazards while ground running including:
			foreign object ingestion	AVIA-1040	AVIA-1045		2	Explain foreign object ingestion
			jet/prop blast	AVIA-1040	AVIA-1045		2	Explain jet/prop blast
			turbine burst	AVIA-1040	AVIA-1045		2	Explain turbine burst
			personnel	AVIA-1040	AVIA-1045		2	Explain personnel
			hazards created by deviation from procedures (integrated systems)	AVIA-1040	AVIA-1045		2	Explain hazards created by deviation from procedures (integrated systems)
			aircraft restraint (chocks, tie downs etc.).	AVIA-1040	AVIA-1045		2	Explain aircraft restraint (chocks, tie downs etc.).
			noise	AVIA-1040	AVIA-1045		2	Explain noise
12	12	8	engine installation and test procedures.	AVIA-1040	AVIA-1045		2	Explain engine installation and test procedures.
			Perform:	-	-	-	-	-
12	12	9	Procedures for calculating engine cycle counts.	AVIA-1040			3	Perform Procedures for calculating engine cycle counts.
12	12	10	A hot section inspection.	AVIA-1040			3	Perform A hot section inspection.
12	12	11	A simulation of a power check including calculating engine performance from manufacturer's performance charts and interpret data to determine faults such as:	AVIA-1040			3	Perform A simulation of a power check including calculating engine performance from manufacturer's performance charts and interpret data to determine faults such as:
			faulty indication	AVIA-1040			3	Perform faulty indication
			compressor defect	AVIA-1040			3	Perform compressor defect
			turbine defect	AVIA-1040			3	Perform turbine defect
			fuel nozzle contamination	AVIA-1040			3	Perform fuel nozzle contamination
			air leaks	AVIA-1040			3	Perform air leaks
			excessive bleed air	AVIA-1040			3	Perform excessive bleed air
			rigging faults	AVIA-1040			3	Perform rigging faults
12	12	12	engine ground run (students must be involved in live engine operation).	AVIA-1045			3	Perform engine ground run (students must be involved in live engine operation).
			13.0 Propellers and Systems	-	-	-	-	-
			Explain:	-	-	-	-	-
13	0	1	theory and design of aircraft propellers including:	AVIA 1052			2	Explain theory and design of aircraft propellers including:
			forces acting on a propeller	AVIA 1052			2	Explain forces acting on a propeller
			lift and angle of attack	AVIA 1052			2	Explain lift and angle of attack
			propeller construction materials	AVIA 1052			2	Explain propeller construction materials
13	0	2	fixed pitch, controllable pitch, constant speed, feathering and reversing propellers.	AVIA 1052			2	Explain fixed pitch, controllable pitch, constant speed, feathering and reversing propellers.
13	0	3	methods of controlling propeller pitch including:	AVIA 1052			2	Explain methods of controlling propeller pitch including:
			springs	AVIA 1052			2	Explain springs
			counter weights	AVIA 1052			2	Explain counter weights
			hydraulic	AVIA 1052			2	Explain hydraulic
			pneumatic	AVIA 1052			2	Explain pneumatic
			electric	AVIA 1052			2	Explain electric
			ground adjustable	AVIA 1052			2	Explain ground adjustable
			governors	AVIA 1052			2	Explain governors
			synchronizers	AVIA 1052			2	Explain synchronizers
			synchrophasers	AVIA 1052			2	Explain synchrophasers
			feathering and unfeathering	AVIA 1052			2	Explain feathering and unfeathering
			reversing	AVIA 1052			2	Explain reversing
			unfeathering accumulators	AVIA 1052			2	Explain unfeathering accumulators
			negative torque sensing	AVIA 1052	AVIA-1040		2	Explain negative torque sensing
			auto feather	AVIA 1052	AVIA-1040		2	Explain auto feather
13	0	4	propeller indication including:	AVIA 1052			2	Explain propeller indication including:
			speed sensing	AVIA 1052			2	Explain speed sensing
			torque sensing	AVIA 1052			2	Explain torque sensing
			blade angle indication	AVIA 1052			2	Explain blade angle indication
13	0	5	propeller installation and maintenance including:	AVIA 1052	AVIA-1040		2	Explain propeller installation and maintenance including:
			flange mount	AVIA 1052	AVIA-1040		2	Explain flange mount
			spline shaft	AVIA 1052			2	Explain spline shaft

		taper shaft	AVIA 1052			2	Explain taper shaft	
		blade repair	AVIA 1052	AVIA-1040		2	Explain blade repair	
		inspection techniques	AVIA 1052	AVIA-1040		2	Explain inspection techniques	
		balancing	AVIA 1052	AVIA-1040		2	Explain balancing	
		tracking	AVIA 1052	AVIA-1040		2	Explain tracking	
13	0	6	propeller disassembly and reassembly including:	AVIA 1052	AVIA-1040	AVIA-1045	2	Explain propeller disassembly and reassembly including:
		blade installation	AVIA 1052	AVIA-1040	AVIA-1045	2	Explain blade installation	
		hub setup	AVIA 1052	AVIA-1040	AVIA-1045	2	Explain hub setup	
		electrical connection	AVIA 1052	AVIA-1040	AVIA-1045	2	Explain electrical connection	
		associated systems (de-ice, beta pickups)	AVIA 1052	AVIA-1040	AVIA-1045	2	Explain associated systems (de-ice, beta pickups)	
		spinner backing plates	AVIA 1052			2	Explain spinner backing plates	
		Perform:	-	-	-	-	-	
13	0	7	propeller installation, safe operation, inspection, adjustment and minor repair.	AVIA 1052	AVIA-1040		3	Perform propeller installation, safe operation, inspection, adjustment and minor repair.
14.0 HYDRAULIC and PNEUMATIC POWER			-	-	-	-	-	
		Explain:	-	-	-	-	-	
14	0	1	safety precautions, including high pressure bottles and accumulators.	AVIA-1024			2	Explain safety precautions, including high pressure bottles and accumulators.
14	0	2	fluid dynamics, types of fluid and system components.	AVIA-1032			2	Explain fluid dynamics, types of fluid and system components.
14	0	3	system design including multiple and integrated systems and system redundancy.	AVIA-1032			2	Explain system design including multiple and integrated systems and system redundancy.
14	0	4	system maintenance.	AVIA-1032			2	Explain system maintenance.
		Perform:	-	-	-	-	-	
14	0	5	operation, inspection and testing of a hydraulic system.	AVIA-1032			3	Perform operation, inspection and testing of a hydraulic system.
14	0	6	servicing of a high pressure accumulator.	AVIA-1032			3	Perform servicing of a high pressure accumulator.
15.0 PNEUMATICS			-	-	-	-	-	
		Explain:	-	-	-	-	-	
15	0	1	the differences between hydraulic and pneumatic systems.	AVIA-1032			2	Explain the differences between hydraulic and pneumatic systems.
15	0	2	the principles of operation, components, maintenance and servicing of a pneumatic system including:	AVIA-1032			2	Explain the principles of operation, components, maintenance and servicing of a pneumatic system including:
		temperature regulation	AVIA-1032			2	Explain temperature regulation	
		pressure control	AVIA-1032			2	Explain pressure control	
		flow control	AVIA-1032			2	Explain flow control	
		sources and common applications	AVIA-1032			2	Explain sources and common applications	
16.0 AIRCRAFT PLUMBING			-	-	-	-	-	
		Explain:	-	-	-	-	-	
16	0	1	the standard fittings and hardware identification systems.	AVIA-1038			2	Explain the standard fittings and hardware identification systems.
		Perform:	-	-	-	-	-	
16	0	2	assembly, installation, inspection and testing of hose and rigid tube assemblies.	AVIA-1038			3	Perform assembly, installation, inspection and testing of hose and rigid tube assemblies.
17.0 LANDING GEAR			-	-	-	-	-	
		Explain:	-	-	-	-	-	
17	0	1	the various types and configurations of landing gear assemblies including shock absorbing and non-shock absorbing systems.	AVIA-1032	AVIA 1050	AVIA-1035	2	Explain the various types and configurations of landing gear assemblies including shock absorbing and non-shock absorbing systems.
17	0	2	the purpose and operation of shimmy dampers.	AVIA-1032			2	Explain the purpose and operation of shimmy dampers.
17	0	3	the operation of components of landing gear retraction and anti-retraction systems.	AVIA-1032			2	Explain the operation of components of landing gear retraction and anti-retraction systems.
17	0	4	the operation and components of hydraulic and mechanical, emergency extension systems.	AVIA-1032			2	Explain the operation and components of hydraulic and mechanical, emergency extension systems.
17	0	5	various brake types.	AVIA-1032			2	Explain various brake types.
17	0	6	anti-skid and skid warning systems.	AVIA-1032			2	Explain anti-skid and skid warning systems.
17	0	7	basic, boosted, power, automatic and emergency braking systems and components.	AVIA-1032			2	Explain basic, boosted, power, automatic and emergency braking systems and components.
17	0	8	brake indicating systems including break wear and temperature indication.	AVIA-1032			2	Explain brake indicating systems including break wear and temperature indication.
17	0	9	mechanical and powered steering systems.	AVIA-1032			2	Explain mechanical and powered steering systems.
17	0	10	the purpose of air ground sensing systems.	AVIA-1032			2	Explain the purpose of air ground sensing systems.
		Perform:	-	-	-	-	-	
17	0	11	disassembly, reassembly and servicing of an oleo.	AVIA-1032			3	Perform disassembly, reassembly and servicing of an oleo.
17	0	12	removal, disassembly, visual inspection, reassembly, servicing and installation, of wheels, tubes and tires.	AVIA-1032			3	Perform removal, disassembly, visual inspection, reassembly, servicing and installation, of wheels, tubes and tires.
17	0	13	A retractable landing gear inspection including a gear swing and functional check.	AVIA-1032			3	Perform A retractable landing gear inspection including a gear swing and functional check.
17	0	14	basic brake system inspection and servicing.	AVIA-1032			3	Perform basic brake system inspection and servicing.
17	0	15	installation and rigging check of floats or skis.	AVIA-1032			3	Perform installation and rigging check of floats or skis.
18.0 ENVIRONMENTAL CONTROL SYSTEMS			-	-	-	-	-	
		Identify:	-	-	-	-	-	
18	0	1	air sources for cabin pressurization.	AVIA-1032			1	Identify air sources for cabin pressurization.
		Explain:	-	-	-	-	-	
18	0	2	fundamentals of heating, cooling and ventilation systems and their components including:	AVIA-1032	AVIA-1046		2	Explain fundamentals of heating, cooling and ventilation systems and their components including:
		air cycle machine	AVIA-1032			2	Explain air cycle machine	
		vapour cycle cooling	AVIA-1032			2	Explain vapour cycle cooling	
		bleed air heating	AVIA-1032			2	Explain bleed air heating	
		heat exchangers	AVIA-1032			2	Explain heat exchangers	
		exhaust type heaters	AVIA-1032			2	Explain exhaust type heaters	
		combustion type heaters	AVIA-1032	AVIA-1046		2	Explain combustion type heaters	
18	0	3	electrical/electronic equipment cooling systems.	AVIA-1032			2	Explain electrical/electronic equipment cooling systems.
18	0	4	cabin pressure fundamentals and components including system safety precautions and functional tests.	AVIA-1032			2	Explain cabin pressure fundamentals and components including system safety precautions and functional tests.
18	0	5	the various oxygen system fundamentals and component operation including:	AVIA-1032			2	Explain the various oxygen system fundamentals and component operation including:
		solid state/chemical oxygen	AVIA-1032			2	Explain solid state/chemical oxygen	
		liquid oxygen	AVIA-1032			2	Explain liquid oxygen	
		gaseous oxygen	AVIA-1032			2	Explain gaseous oxygen	
		Perform:	-	-	-	-	-	
18	0	6	the inspection and servicing of environmental control systems including:	AVIA-1032			3	Perform the inspection and servicing of environmental control systems including:
		heating systems including exhaust type heaters and combustion heaters	AVIA-1032			3	Perform heating systems including exhaust type heaters and combustion heaters	
		oxygen storage systems utilizing standard handling and safety procedures	AVIA-1032			3	Perform oxygen storage systems utilizing standard handling and safety procedures	
19.0 FUEL			-	-	-	-	-	
		Explain:	-	-	-	-	-	
19	0	1	fuels - types, properties and additives.	AVIA-1041			2	Explain fuels - types, properties and additives.

19	0	2	airframe fuel system configurations and component functions including:	AVIA-1041			2	Explain airframe fuel system configurations and component functions including:
			storage	AVIA-1041			2	Explain storage
			jettison	AVIA-1041			2	Explain jettison
			distribution	AVIA-1041			2	Explain distribution
			venting	AVIA-1041			2	Explain venting
			grounding	AVIA-1041			2	Explain grounding
			indication	AVIA-1041			2	Explain indication
			Perform:	-	-	-	-	-
19	0	3	fuel system maintenance and safety precautions	AVIA-1041			3	Perform fuel system maintenance and safety precautions
20.0 ICE AND RAIN PROTECTION				-	-	-	-	-
			Explain:	-	-	-	-	-
20	0	1	causes and types of ice formation.	AVIA-1032			2	Explain causes and types of ice formation.
20	0	2	types of ice detection systems.	AVIA-1032			2	Explain types of ice detection systems.
20	0	3	anti-ice and de-ice systems and principles of operation including:	AVIA-1032			2	Explain anti-ice and de-ice systems and principles of operation including:
			propeller/rotor	AVIA-1032			2	Explain propeller/rotor
			powerplant (air inlets, external sensors, fuel heaters)	AVIA-1032			2	Explain powerplant (air inlets, external sensors, fuel heaters)
			windshields	AVIA-1032			2	Explain windshields
			air data gathering devices	AVIA-1032			2	Explain air data gathering devices
			vents and drains	AVIA-1032			2	Explain vents and drains
			airframe surfaces	AVIA-1032			2	Explain airframe surfaces
			water/waste systems	AVIA-1032	AVIA-1041		2	Explain water/waste systems
20	0	4	rain repellent systems.	AVIA-1032			2	Explain rain repellent systems.
			Perform:	-	-	-	-	-
20	0	5	operation, inspection and testing of an ice protection system.	AVIA-1032			3	Perform operation, inspection and testing of an ice protection system.
21.0 EMERGENCY SYSTEMS				-	-	-	-	-
			Identify:	-	-	-	-	-
21	0	1	the types and operation of emergency lighting systems.	AVIA-1030			1	Identify the types and operation of emergency lighting systems.
21	0	2	the types of ELTs including Underwater Locating devices (ULDs).	AVIA-1043			1	Identify the types of ELTs including Underwater Locating devices (ULDs).
			Explain:	-	-	-	-	-
21	0	3	requirements and procedures for inspecting, installing and testing of ELTs.	AVIA-1043			2	Explain requirements and procedures for inspecting, installing and testing of ELTs.
21	0	4	floatation device types, inspection and servicing including personal floatation devices, and airframe floatation devices.	AVIA-1041			2	Explain floatation device types, inspection and servicing including personal floatation devices, and airframe floatation devices.
21	0	5	emergency breathing apparatus	AVIA-1032			2	Explain emergency breathing apparatus.
21.1 Fire Protection				-	-	-	-	-
			Identify:	-	-	-	-	-
21	1	1	various types of aircraft fire detection systems e.g. spot detectors, continuous loop, infra-red and ultra-violet.	AVIA-1032			2	Explain various types of aircraft fire detection systems e.g. spot detectors, continuous loop, infra-red and ultra-violet.
21	1	2	various types of suppression and extinguishing systems and safety precautions including aircraft installed and portable.	AVIA-1032			2	Explain various types of suppression and extinguishing systems and safety precautions including aircraft installed and portable.
			Perform:	-	-	-	-	-
21	1	3	fire detection system inspection and operational test.	AVIA-1032			3	Perform fire detection system inspection and operational test.
22.0 ELECTRICITY AND ELECTRICAL/ELECTRONIC SYSTEMS				-	-	-	-	-
22.1 Basic Electricity DC				-	-	-	-	-
			Explain:	-	-	-	-	-
22	1	1	electron theory and electrostatics	AVIA-1030			2	Explain electron theory and electrostatics.
22	1	2	magnetism and electromagnetism.	AVIA-1030			2	Explain magnetism and electromagnetism.
22	1	3	electromagnetic induction.	AVIA-1030			2	Explain electromagnetic induction.
22	1	4	units of electrical measurement:	AVIA-1030			2	Explain units of electrical measurement:
			voltage	AVIA-1030			2	Explain voltage
			current	AVIA-1030			2	Explain current
			resistance	AVIA-1030			2	Explain resistance
22	1	5	sources of electrical energy.	AVIA-1030			2	Explain sources of electrical energy.
22	1	6	characteristics of series, parallel, and series/parallel circuits.	AVIA-1030			2	Explain characteristics of series, parallel, and series/parallel circuits.
22	1	7	laws and theorems utilized in dc circuit analysis.	AVIA-1030			2	Explain laws and theorems utilized in dc circuit analysis.
22	1	8	circuit control devices including, but not limited to:	AVIA-1030			2	Explain circuit control devices including, but not limited to:
			switches	AVIA-1030			2	Explain switches
			relays	AVIA-1030			2	Explain relays
			fuses	AVIA-1030			2	Explain fuses
			circuit breakers	AVIA-1030			2	Explain circuit breakers
			capacitors	AVIA-1030			2	Explain capacitors
			capacitance in dc circuits	AVIA-1030			2	Explain capacitance in dc circuits
			construction and operation of diodes	AVIA-1030			2	Explain construction and operation of diodes
			construction and operation of transistors	AVIA-1030			2	Explain construction and operation of transistors
22	1	9	DC motors and generator principles	AVIA-1030			2	Explain DC motors and generator principles
22	1	10	electron theory and electrostatics.	AVIA-1030			2	Explain electron theory and electrostatics.
			Perform:	-	-	-	-	-
22	1	11	circuit calculation using laws and theorems associated with DC circuit analysis.	AVIA-1030			3	Perform circuit calculation using laws and theorems associated with DC circuit analysis.
22	1	12	tasks utilizing a multimeter to measure voltage, resistance and current in a DC circuit.	AVIA-1030			3	Perform tasks utilizing a multimeter to measure voltage, resistance and current in a DC circuit.
22	1	13	calculations to substantiate the theories of Ohm's law and Kirchhoff's law.	AVIA-1030			3	Perform calculations to substantiate the theories of Ohm's law and Kirchhoff's law.
22	1	14	measurement of different battery types under load and no-load conditions.	AVIA-1030			3	Perform measurement of different battery types under load and no-load conditions.
22	1	15	construction of an electromagnet.	AVIA-1030			3	Perform construction of an electromagnet.
22	1	16	construction of electrical circuits from components that are the same as those previously solved mathematically.	AVIA-1030			3	Perform construction of electrical circuits from components that are the same as those previously solved mathematically.
			test, troubleshoot, Repair, adjust, remove and Replace:	AVIA-1042			3	Perform test, troubleshoot, Repair, adjust, remove and Replace:
22	1	17	DC generator, an aircraft DC motor, an aircraft alternator.	AVIA-1042			3	Perform DC generator, an aircraft DC motor, an aircraft alternator.
22	1	18	test diodes and transistors for serviceability.	AVIA-1042	AVIA-1036		3	Perform test diodes and transistors for serviceability.
22	1	19	switches, relays, circuit breakers, and fuses.	AVIA-1042	AVIA-1036		3	Perform switches, relays, circuit breakers, and fuses.
22.2 Basic Electricity - AC				-	-	-	-	-
			Identify:	-	-	-	-	-
22	2	1	a wiring diagram for a simple alternator circuit, then accomplish the wiring of the same circuit.	AVIA-1036			1	Identify a wiring diagram for a simple alternator circuit, then accomplish the wiring of the same circuit.
			Explain:	-	-	-	-	-
22	2	2	AC current.	AVIA-1036			2	Explain AC current.
22	2	3	inductive pickups.	AVIA-1036			2	Explain inductive pickups.
22	2	4	the effects of capacitors in electrical circuits.	AVIA-1036			2	Explain the effects of capacitors in electrical circuits.
22	2	5	the use for capacitors.	AVIA-1036			2	Explain the use for capacitors.

22	2	6	differences between AC and dc motors.	AVIA-1036			2	Explain differences between AC and dc motors.
22	2	7	the use of AC alternators in aircraft.	AVIA-1036			2	Explain the use of AC alternators in aircraft.
22	2	8	generator control units.	AVIA-1036			2	Explain generator control units.
22	2	9	single-phase AC actuator motors.	AVIA-1036			2	Explain single-phase AC actuator motors.
22	2	10	three-phase AC motors.	AVIA-1036			2	Explain three-phase AC motors.
22	2	11	the use of the common measuring devices.	AVIA-1036			2	Explain the use of the common measuring devices.
Explain:								
22	2	12	principles of AC theory	AVIA-1036			2	Explain principles of AC theory
22	2	13	RMS and peak values	AVIA-1036			2	Explain RMS and peak values
22	2	14	frequency, period, phase	AVIA-1036			2	Explain frequency, period, phase
22	2	15	use of AC measuring devices, including, but not limited to, multimeters and oscilloscopes	AVIA-1036			2	Explain use of AC measuring devices, including, but not limited to, multimeters and oscilloscopes
22	2	16	Polyphase AC circuits	AVIA-1036			2	Explain Polyphase AC circuits
22	2	17	aircraft application of ac	AVIA-1036			2	Explain aircraft application of ac
22	2	18	inductance coils, inductors and inductance in AC circuits	AVIA-1036			2	Explain inductance coils, inductors and inductance in AC circuits
22	2	19	transformers	AVIA-1036			2	Explain transformers
22	2	20	capacitors and capacitance in AC circuits	AVIA-1036			2	Explain capacitors and capacitance in AC circuits
22	2	21	reactance and impedance	AVIA-1036			2	Explain reactance and impedance
22	2	22	resonant circuits	AVIA-1036			2	Explain resonant circuits
22	2	23	phase angle, and power factor calculations	AVIA-1036			2	Explain phase angle, and power factor calculations
22	2	24	frequency and phase.	AVIA-1036			2	Explain frequency and phase.
22	2	25	AC generation theory, including construction and maintenance of alternators.	AVIA-1036			2	Explain AC generation theory, including construction and maintenance of alternators.
22	2	26	the use of the multimeters, oscilloscope and other AC measuring devices.	AVIA-1036			2	Explain the use of the multimeters, oscilloscope and other AC measuring devices.
22	2	27	impedance.	AVIA-1036			2	Explain impedance.
22	2	28	transformers.	AVIA-1036			2	Explain transformers.
22	2	29	the principles of AC generation.	AVIA-1036			2	Explain the principles of AC generation.
22	2	30	aircraft alternators.	AVIA-1036			2	Explain aircraft alternators.
22	2	31	voltage regulation.	AVIA-1036			2	Explain voltage regulation.
22	2	32	inverters.	AVIA-1036			2	Explain inverters.
22	2	33	variable-speed, constant-frequency power systems.	AVIA-1036			2	Explain variable-speed, constant-frequency power systems.
22	2	34	AC motors.	AVIA-1036			2	Explain AC motors.
22	2	35	improvement of starting qualities.	AVIA-1036			2	Explain improvement of starting qualities.
22	2	36	repulsion motors.	AVIA-1036			2	Explain repulsion motors.
22	2	37	synchronous motors.	AVIA-1036			2	Explain synchronous motors.
22	2	38	motor losses.	AVIA-1036			2	Explain motor losses.
22	2	39	power conversion methods.	AVIA-1036			2	Explain power conversion methods.
22	2	40	using diodes to convert AC to dc.	AVIA-1036			2	Explain using diodes to convert AC to dc.
Perform:								
22	2	41	circuit calculations using laws and theorems associated with AC circuit analysis.	AVIA-1036			3	Perform circuit calculations using laws and theorems associated with AC circuit analysis.
22	2	42	tasks demonstrating the proper use of test equipment to measure voltage, current, reactance and frequency in AC circuits.	AVIA-1036			3	Perform tasks demonstrating the proper use of test equipment to measure voltage, current, reactance and frequency in AC circuits.
22	2	43	serviceability test of a diode and a transistor.	AVIA-1036			3	Perform serviceability test of a diode and a transistor.
22	2	44	evaluation of lab equipment.	AVIA-1036			3	Perform evaluation of lab equipment.
22	2	45	AC voltage and capacitance measurement.	AVIA-1036			3	Perform AC voltage and capacitance measurement.
22	2	46	a transformer characteristics experiment using a semi-conductor.	AVIA-1036			3	Perform a transformer characteristics experiment using a semi-conductor.
22	2	47	applications using an oscilloscope and other common measuring devices.	AVIA-1036			3	Perform applications using an oscilloscope and other common measuring devices.
22	2	48	inspection and servicing of motors.	AVIA-1036			3	Perform inspection and servicing of motors.
22.3 Electrical Systems								
Identify:								
22	3	1	electrical diagram symbols for control and protection devices.	AVIA-1030	AVIA-1036	AVIA-1042	1	Identify electrical diagram symbols for control and protection devices.
22	3	2	components which make up aircraft electrical motor circuits.	AVIA-1030	AVIA-1036	AVIA-1042	1	Identify components which make up aircraft electrical motor circuits.
22	3	3	various types of wiring diagrams, drawings and schematic symbology.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain various types of wiring diagrams, drawings and schematic symbology.
22	3	4	basic circuit components.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain basic circuit components.
22	3	5	maintenance of electrical wiring systems.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain maintenance of electrical wiring systems.
22	3	6	types of electrical control devices.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain types of electrical control devices.
22	3	7	types of electrical circuit protection devices.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain types of electrical circuit protection devices.
22	3	8	electrical supply and generation components.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain electrical supply and generation components.
22	3	9	maintenance of electrical power supply and generation systems.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain maintenance of electrical power supply and generation systems.
22	3	10	aircraft indication, monitoring and lighting circuits.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain aircraft indication, monitoring and lighting circuits.
22	3	11	various troubleshooting techniques.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain various troubleshooting techniques.
22	3	12	electrical motor theory.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain electrical motor theory.
22	3	13	electrical components of a landing gear system.	AVIA-1030		AVIA-1042	2	Explain electrical components of a landing gear system.
22	3	14	servicing and inspection of electrical landing gear system.	AVIA-1030		AVIA-1042	2	Explain servicing and inspection of electrical landing gear system.
22	3	15	safety procedures for maintenance of electrical systems	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain safety procedures for maintenance of electrical systems.
Explain:								
22	3	16	construction, maintenance, and operation of aircraft batteries (all types).	AVIA-1030	AVIA-1042		2	Explain construction, maintenance, and operation of aircraft batteries (all types).
22	3	17	construction, maintenance, and operation of aircraft generators (dc).	AVIA-1030	AVIA-1042		2	Explain construction, maintenance, and operation of aircraft generators (dc).
22	3	18	construction, maintenance, and operation of aircraft generators (ac).	AVIA-1036	AVIA-1042		2	Explain construction, maintenance, and operation of aircraft generators (ac).
22	3	19	construction, maintenance, and operation of aircraft alternators.	AVIA-1030	AVIA-1042		2	Explain construction, maintenance, and operation of aircraft alternators.
22	3	20	construction, maintenance, and operation of TRUs.	AVIA-1036	AVIA-1042		2	Explain construction, maintenance, and operation of TRUs.
22	3	21	construction, maintenance, and operation of generator control units (gcus).	AVIA-1030	AVIA-1042		2	Explain construction, maintenance, and operation of generator control units (gcus).
22	3	22	construction, maintenance, and operation of constant speed drives and integrated drive generators (IDG).	AVIA-1036	AVIA-1042		2	Explain construction, maintenance, and operation of constant speed drives and integrated drive generators (IDG).
22	3	23	current transformers.	AVIA-1036	AVIA-1042		2	Explain current transformers.
22	3	24	construction, maintenance, and operation of aircraft inverters (rotary and static).	AVIA-1036	AVIA-1042		2	Explain construction, maintenance, and operation of aircraft inverters (rotary and static).
22	3	25	construction, maintenance, and operation of aircraft motors (AC and DC).	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain construction, maintenance, and operation of aircraft motors (AC and DC).
22	3	26	construction, maintenance, and operation of aircraft synchros, including transmitters (receivers and resolvers).	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain construction, maintenance, and operation of aircraft synchros, including transmitters (receivers and resolvers).
22	3	27	proper use of test equipment and support curriculum.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain proper use of test equipment and support curriculum.

22	3	28	wiring practices, including wire and coaxial cable specs (mil and faa).	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain wiring practices, including wire and coaxial cable specs (mil and faa).
22	3	29	bonding emi/rfi suppression techniques.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain bonding emi/rfi suppression techniques.
22	3	30	light aircraft electrical power distribution systems (single and multi engine).	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain light aircraft electrical power distribution systems (single and multi engine).
22	3	31	Large multi engine aircraft electrical power distribution systems.	AVIA-1030	AVIA-1036	AVIA-1042	2	Explain Large multi engine aircraft electrical power distribution systems.
22	3	32	Perform: tasks using wiring diagram(s), and appropriate test equipment to troubleshoot an electrical power distribution system fault.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform tasks using wiring diagram(s), and appropriate test equipment to troubleshoot an electrical power distribution system fault.
22	3	33	the following tasks, employing acceptable methods, techniques and practices:	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform the following tasks, employing acceptable methods, techniques and practices:
			wire stripping	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform wire stripping
			soldering and desoldering	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform soldering and desoldering
			various crimping methods	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform various crimping methods
			various splicing techniques	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform various splicing techniques
			looming procedures	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform looming procedures
			harness and connector assembly	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform harness and connector assembly
			wire routing, looming, clamping and lacing	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform wire routing, looming, clamping and lacing
			wire selection and identification	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform wire selection and identification
			electrical load analysis	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform electrical load analysis
22	3	34	reading of electrical supply power generation systems wiring diagrams.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform reading of electrical supply power generation systems wiring diagrams.
22	3	35	servicing and charging of a lead acid battery in a battery shop.	AVIA-1030			3	Perform servicing and charging of a lead acid battery in a battery shop.
22	3	36	servicing and deep cycling of a nickel-cadmium battery in a battery shop.	AVIA-1030			3	Perform servicing and deep cycling of a nickel-cadmium battery in a battery shop.
22	3	37	the installation and removal of a nickel-cadmium battery of an aircraft.	AVIA-1030			3	Perform the installation and removal of a nickel-cadmium battery of an aircraft.
22	3	38	installation and removal of a lead acid battery on an aircraft.	AVIA-1030			3	Perform installation and removal of a lead acid battery on an aircraft.
22	3	39	construction of a basic wiring harness using acceptable methods, techniques and practices.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform construction of a basic wiring harness using acceptable methods, techniques and practices.
22	3	40	troubleshooting of various control and protection devices as required by schematic diagram of a simple aircraft circuit.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform troubleshooting of various control and protection devices as required by schematic diagram of a simple aircraft circuit.
22	3	41	servicing and testing of an alternator and generator.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform servicing and testing of an alternator and generator.
22	3	42	connection and testing of components to simulate an aircraft generation system.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform connection and testing of components to simulate an aircraft generation system.
22	3	43	troubleshooting of a given defect in an aircraft electrical system, employing the circuit diagram and appropriate test equipment.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform troubleshooting of a given defect in an aircraft electrical system, employing the circuit diagram and appropriate test equipment.
22	3	44	inspection and testing of an aircraft motor system components.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform inspection and testing of an aircraft motor system components.
22	3	45	testing, troubleshooting, repair, adjustment, removal and replacement of a motor, generator or alternator.	AVIA-1030	AVIA-1036	AVIA-1042	3	Perform testing, troubleshooting, repair, adjustment, removal and replacement of a motor, generator or alternator.
22.4 Aircraft Instrumentation								
			Identify:					
22	4	1	both mechanically operated and electrical/electronic operated.	AVIA-1030	AVIA-1036	AVIA-1042	1	Identify both mechanically operated and electrical/electronic operated.
22	4	2	instruments according to function.	AVIA-1030	AVIA-1036	AVIA-1042	1	Identify instruments according to function.
			Explain:					
22	4	3	the vertical, and instantaneous-vertical speed indicators.	AVIA-1046	AVIA-1047		2	Explain the vertical, and instantaneous-vertical speed indicators.
22	4	4	A vacuum pump system.	AVIA-1046			2	Explain A vacuum pump system.
22	4	5	various display types	AVIA-1046	AVIA-1047		2	Explain various display types
22	4	6	various methods of display.	AVIA-1046	AVIA-1047		2	Explain various methods of display.
22	4	7	electrical flight instruments.	AVIA-1046	AVIA-1047		2	Explain electrical flight instruments.
22	4	8	engine electrical indicating instruments.	AVIA-1046	AVIA-1047		2	Explain engine electrical indicating instruments.
22	4	9	engine instrument installation and marking.	AVIA-1046			2	Explain engine instrument installation and marking.
22	4	10	testing of engine electrical indicating instruments.	AVIA-1046			2	Explain testing of engine electrical indicating instruments.
22	4	11	systems that employ electrical indicating instruments.	AVIA-1046			2	Explain systems that employ electrical indicating instruments.
22	4	12	maintenance of systems electrical indicating instruments.	AVIA-1046			2	Explain maintenance of systems electrical indicating instruments.
22	4	13	the types of instruments using direct drive linkages.	AVIA-1046			2	Explain the types of instruments using direct drive linkages.
22	4	14	installation of direct linkage and drive mechanisms.	AVIA-1046			2	Explain installation of direct linkage and drive mechanisms.
22	4	15	servicing of pitot/static instruments.	AVIA-1046			2	Explain servicing of pitot/static instruments.
			Explain:					
22	4	16	the reasons for using instrumentation.	AVIA-1046			2	Explain the reasons for using instrumentation.
22	4	17	the principles of absolute pressure measurement.	AVIA-1046			2	Explain the principles of absolute pressure measurement.
22	4	18	the principles of gauge pressure measurement.	AVIA-1046			2	Explain the principles of gauge pressure measurement.
22	4	19	the principles of differential pressure measurement.	AVIA-1046			2	Explain the principles of differential pressure measurement.
22	4	20	altimeters.	AVIA-1046	AVIA-1047		2	Explain altimeters.
22	4	21	airspeed indicators.	AVIA-1046	AVIA-1047		2	Explain airspeed indicators.
22	4	22	air data computers (ADC).	AVIA-1046	AVIA-1047		2	Explain air data computers (ADC).
22	4	23	electrically driven instruments.	AVIA-1046			2	Explain electrically driven instruments.
22	4	24	temperature measuring instruments.	AVIA-1046			2	Explain temperature measuring instruments.
22	4	25	gyroscopic principles.	AVIA-1046			2	Explain gyroscopic principles.
22	4	26	the sources of power of gyroscopes.	AVIA-1046			2	Explain the sources of power of gyroscopes.
22	4	27	gyro attitude instruments.	AVIA-1046			2	Explain gyro attitude instruments.
22	4	28	rate gyro instruments.	AVIA-1046			2	Explain rate gyro instruments.
22	4	29	the principles of navigation.	AVIA-1046			2	Explain the principles of navigation.
22	4	30	the procedures for correcting errors (compass swing).	AVIA-1046			2	Explain the procedures for correcting errors (compass swing).
22	4	31	the procedure for setting up test equipment.	AVIA-1046			2	Explain the procedure for setting up test equipment.
			Perform:					
22	4	32	A functional check of a pitot/static system.	AVIA-1046	AVIA-1047		3	Perform A functional check of a pitot/static system.
22	4	33	draining of a pitot/static system.	AVIA-1046	AVIA-1047		3	Perform draining of a pitot/static system.
22	4	34	inspections of instruments for correct installation and markings.	AVIA-1046	AVIA-1047		3	Perform inspections of instruments for correct installation and markings.
22	4	35	A functional check on a liquid pressure instrument system.	AVIA-1046			3	Perform A functional check on a liquid pressure instrument system.
22	4	36	A check of aircraft instruments for correct function.	AVIA-1046			3	Perform A check of aircraft instruments for correct function.
22	4	37	A functional test of an exhaust gas temperature system employing suitable testing.	AVIA-1046			3	Perform A functional test of an exhaust gas temperature system employing suitable testing.
22	4	38	packaging of an instrument for shipping.	AVIA-1046			3	Perform packaging of an instrument for shipping.
22	4	39	A functional check of a fuel quantity indication system.	AVIA-1046			3	Perform A functional check of a fuel quantity indication system.
22	4	40	A simulated compass swing.	AVIA-1046			3	Perform A simulated compass swing.
22.5 Avionics								
			Identify:					
22	5	1	aircraft radio antennas.	AVIA-1047			1	Identify aircraft radio antennas.

22	5	2	audio components.	AVIA-1047				2	Explain audio components.
22	5	3	transmission lines.	AVIA-1047				2	Explain transmission lines.
			Explain:						
22	5	4	radio theory.	AVIA-1047				2	Explain radio theory.
22	5	5	radio transmitters.	AVIA-1047				2	Explain radio transmitters.
22	5	6	radio receivers.	AVIA-1047				2	Explain radio receivers.
22	5	7	superheterodyne operation.	AVIA-1047				2	Explain superheterodyne operation.
22	5	8	modulation (am/fm).	AVIA-1047				2	Explain modulation (am/fm).
22	5	9	digital communications.	AVIA-1047				2	Explain digital communications.
22	5	10	HF communication systems.	AVIA-1047				2	Explain HF communication systems.
22	5	11	VHF communication systems.	AVIA-1047				2	Explain VHF communication systems.
22	5	12	Selcal.	AVIA-1047				2	Explain Selcal.
22	5	13	interphone systems (flight / service).	AVIA-1047				2	Explain interphone systems (flight / service).
22	5	14	audio integration.	AVIA-1047				2	Explain audio integration.
22	5	15	passenger entertainment systems (multiplex/audio/video).	AVIA-1047				2	Explain passenger entertainment systems (multiplex/audio/video).
22	5	16	ELTs.	AVIA-1047				2	Explain ELTs.
22	5	17	satellite communication systems.	AVIA-1047				2	Explain satellite communication systems.
22	5	18	navigation principles.	AVIA-1047				2	Explain navigation principles.
22	5	19	flight management systems.	AVIA-1047				2	Explain flight management systems.
22	5	20	inertial navigation systems.	AVIA-1047				2	Explain inertial navigation systems.
22	5	21	inertial Reference systems.	AVIA-1047				2	Explain inertial Reference systems.
22	5	22	radio navigation systems, including, but not limited to:	AVIA-1047				2	Explain radio navigation systems, including, but not limited to:
			DF	AVIA-1047				2	Explain DF
			VOR	AVIA-1047				2	Explain VOR
			ILS	AVIA-1047				2	Explain ILS
			GPS	AVIA-1047				2	Explain GPS
			DME	AVIA-1047				2	Explain DME
			ATC transponder	AVIA-1047				2	Explain ATC transponder
			WX radar	AVIA-1047				2	Explain WX radar
			radio altimeters	AVIA-1047				2	Explain radio altimeters
			TCAS	AVIA-1047				2	Explain TCAS
			GPWS	AVIA-1047				2	Explain GPWS
22	5	23	video displays, EFIS, EICAS, flight data recorders, Cockpit Voice recorders.	AVIA-1047				2	Explain video displays, EFIS, EICAS, flight data recorders, Cockpit Voice recorders.
22	5	24	frequency spectrum.	AVIA-1047				2	Explain frequency spectrum.
22	5	25	IFR versus VFR.	AVIA-1047				2	Explain IFR versus VFR.
22	5	26	maximum power transfer theorem.	AVIA-1047				2	Explain maximum power transfer theorem.
22	5	27	functions of audio control panels.	AVIA-1047				2	Explain functions of audio control panels.
22	5	28	functions of communication controls.	AVIA-1047				2	Explain functions of communication controls.
22	5	29	antenna fundamentals.	AVIA-1047				2	Explain antenna fundamentals.
22	5	30	HUMS (health and usage monitoring system).	AVIA-1047				2	Explain HUMS (health and usage monitoring system).
22	5	31	avionics installation practices.	AVIA-1047				2	Explain avionics installation practices.
22	5	32	avionics maintenance inspections and system troubleshooting.	AVIA-1047				2	Explain avionics maintenance inspections and system troubleshooting.
22	5	33	interconnections of avionics systems.	AVIA-1047				2	Explain interconnections of avionics systems.
			Perform:						
22	5	34	operational check and inspection of a com T/R system and one NAV system to the LRU (Line Replaceable unit) level on an avionics installation.	AVIA-1047				3	Perform operational check and inspection of a com T/R system and one NAV system to the LRU (Line Replaceable unit) level on an avionics installation.
22	5	35	inspection of an antenna system.	AVIA-1047				3	Perform inspection of an antenna system.
22	5	36	removal and replacement of an avionics LRU or component.	AVIA-1047				3	Perform removal and replacement of an avionics LRU or component.
22	5	37	tasks utilizing a multimeter or equivalent to troubleshoot an avionics wiring interconnection fault.	AVIA-1047				3	Perform tasks utilizing a multimeter or equivalent to troubleshoot an avionics wiring interconnection fault.
			22.6 Data Bus and Logic						
22	6	1	number systems.	AVIA-1047				2	Explain number systems.
22	6	2	use of electrical circuit representations to explain logic gates.	AVIA-1047				2	Explain use of electrical circuit representations to explain logic gates.
22	6	3	boolean equations.	AVIA-1047				2	Explain boolean equations.
22	6	4	the display of digital data.	AVIA-1047				2	Explain the display of digital data.
22	6	5	characteristics of integrated circuits.	AVIA-1047				2	Explain characteristics of integrated circuits.
22	6	6	some applications of integrated circuits.	AVIA-1047				2	Explain some applications of integrated circuits.
22	6	7	use of electrical circuit representations to explain logic gates.	AVIA-1047				2	Explain use of electrical circuit representations to explain logic gates.
22	6	8	functions of computer operations.	AVIA-1047				2	Explain functions of computer operations.
22	6	9	aircraft digital systems.	AVIA-1047				2	Explain aircraft digital systems.
22	6	10	air data computer systems.	AVIA-1047				2	Explain air data computer systems.
22	6	11	flight management systems.	AVIA-1047				2	Explain flight management systems.
22	6	12	thrust management systems.	AVIA-1047				2	Explain thrust management systems.
22	6	13	systems testing and troubleshooting.	AVIA-1047				2	Explain systems testing and troubleshooting.
22	6	14	safety procedures.	AVIA-1047				2	Explain safety procedures.
			Explain:						
22	6	15	the difference between analog and digital systems.	AVIA-1047				2	Explain the difference between analog and digital systems.
22	6	16	logic gates using truth tables.	AVIA-1047				2	Explain logic gates using truth tables.
			Perform:						
22	6	17	determination of correct digital output, given a logic diagram with digital inputs.	AVIA-1047				3	Perform determination of correct digital output, given a logic diagram with digital inputs.
22	6	18	conversion between various numbering systems.	AVIA-1047				3	Perform conversion between various numbering systems.
			22.7 Auto Flight Systems						
			Explain:						
22	7	1	introduction to and system overview of:	AVIA-1047				2	Explain introduction to and system overview of:
			single and multiaxis autopilot	AVIA-1047				2	Explain single and multiaxis autopilot
			yaw damper systems	AVIA-1047				2	Explain yaw damper systems
			flight director systems	AVIA-1047				2	Explain flight director systems
			speed command	AVIA-1047				2	Explain speed command
			stability augmentation systems	AVIA-1047				2	Explain stability augmentation systems
			auto throttle	AVIA-1047				2	Explain auto throttle
			thrust management	AVIA-1047				2	Explain thrust management
			VNAV	AVIA-1047				2	Explain VNAV
			Perform:						
22	7	2	inspection and operation check of an auto-pilot system.	AVIA-1047				3	Perform inspection and operation check of an auto-pilot system.
			23.0 MAINTENANCE PROCEDURES						
			Explain:						

23	0	1	inspection and maintenance requirements for private and commercial aircraft as outlined in the Canadian aviation Regulations.	AVIA-1024	AVIA-1031	AVIA-1037	2	Explain inspection and maintenance requirements for private and commercial aircraft as outlined in the Canadian aviation Regulations.
23	0	2	fundamentals and types of aircraft inspections including: periodic, annual, progressive and approved maintenance schedules	AVIA-1037 AVIA-1037	AVIA-1043 AVIA-1043		2 2	Explain fundamentals and types of aircraft inspections including: Explain periodic, annual, progressive and approved maintenance schedules
			abnormal occurrence (hard landing, lightning strike, etc.)	AVIA-1043			2	Explain abnormal occurrence (hard landing, lightning strike, etc.)
			special (airworthiness Directive or service Bulletin).	AVIA-1037	AVIA-1043		2	Explain special (airworthiness Directive or service Bulletin).
23	0	3	Weight and balance procedures and requirements including: jacking leveling weighing installed equipment list weight and balance report amendment requirements regulatory requirements	AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1033 AVIA-1033 AVIA-1033 AVIA-1033	AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043		2 2 2 2 2 2 2	Explain Weight and balance procedures and requirements including: Explain jacking Explain leveling Explain weighing Explain installed equipment list Explain weight and balance report Explain amendment requirements Explain regulatory requirements
23	0	4	differences between fixed and rotary wing aircraft weight and balance procedures, e.g Lateral center of gravity.	AVIA-1033	AVIA-1043		2	Explain differences between fixed and rotary wing aircraft weight and balance procedures, e.g Lateral center of gravity.
23	0	5	fundamentals of quality assurance	AVIA-1033	AVIA-1043		2	Explain fundamentals of quality assurance.
			Perform:	-	-	-	-	-
23	0	6	A weight and balance procedure on an aircraft, including associated documentation.	AVIA-1043	AVIA-1043		3	Perform A weight and balance procedure on an aircraft, including associated documentation.
23	0	7	completion of documentation for maintenance records including:	AVIA-1033	AVIA-1043		3	Perform completion of documentation for maintenance records including:
23	0	8	computerized information input and retrieval. technical records defect lists technical reports service difficulty reporting	AVIA-1043 AVIA-1033 AVIA-1033 AVIA-1033 AVIA-1043	AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043		3 3 3 3 3	Perform computerized information input and retrieval. Perform technical records Perform defect lists Perform technical reports Perform service difficulty reporting
23	0	9	A typical rotorcraft and fixed wing maintenance schedule (e.g 100 hour or annual inspection)	AVIA-1033	AVIA-1043		3	Perform A typical rotorcraft and fixed wing maintenance schedule (e.g 100 hour or annual inspection)
23	0	10	tasks utilizing Minimum Equipment Lists, Configuration deviation Lists and Built-in test Equipment (Bite) programs	AVIA-1043			3	Perform tasks utilizing Minimum Equipment Lists, Configuration deviation Lists and Built-in test Equipment (Bite) programs
24.0 IMPERIAL AND RELATED UNITS OF MEASURE				-	-	-	-	-
			Perform:	-	-	-	-	-
24	0	1	calculations including conversions using: length: feet, inches, statute mile, nautical mile velocity: feet/sec, miles/hr, knots weight/mass: pounds, ounces volume: pints, quarts, imperial gallons, U.S. gallons temperature: Fahrenheit, Celsius, Rankine, calvin	AVIA 1049 AVIA 1049 AVIA 1050 AVIA 1051 AVIA 1052 AVIA 1030	AVIA-1031 AVIA-1031 AVIA 1050 AVIA 1051 AVIA 1052 AVIA-1030		3 3 3 3 3 3	Perform calculations including conversions using: Perform length: feet, inches, statute mile, nautical mile Perform velocity: feet/sec, miles/hr, knots Perform weight/mass: pounds, ounces Perform volume: pints, quarts, imperial gallons, U.S. gallons Perform temperature: Fahrenheit, Celsius, Rankine, calvin
25.0 566.13 Training Standards Common to all Training Programs				-	-	-	-	-
			(a) Apply:	-	-	-	-	-
25	0	1	Occupational Health And safety practices.	AVIA-1024			3	Perform Occupational Health And safety practices.
25	0	2	the Canadian aviation Regulations applicable to an AME.	AVIA-1024			3	Perform the Canadian aviation Regulations applicable to an AME.
25	0	3	acceptable industry standard practices.	AVIA-1024			3	Perform acceptable industry standard practices.
			(b) Explain:	-	-	-	-	-
25	0	4	aircraft system operation to component level.	AVIA-1035	AVIA-1042	AVIA-1044	2	Explain aircraft system operation to component level.
25	0	5	standard practices for operational checks, inspection and certification of aircraft systems.	AVIA-1035	AVIA-1042	AVIA-1044	2	Explain standard practices for operational checks, inspection and certification of aircraft systems.
25	0	6	procedures and applicable standards required for structural and non-structural repairs and modifications.	AVIA-1038	AVIA-1031		2	Explain procedures and applicable standards required for structural and non-structural repairs and modifications.
25	0	7	the effects of human factors contributing to maintenance errors.	AVIA-1024			2	Explain the effects of human factors contributing to maintenance errors.
			(c) Perform:	-	-	-	-	-
25	0	8	the installation and securing of fasteners and connectors.	AVIA-1031	AVIA-1038		3	Perform the installation and securing of fasteners and connectors.
25	0	9	an applicable sheet metal repair or modification.	AVIA-1031	AVIA-1038		3	Perform an applicable sheet metal repair or modification.
25	0	10	to completion an applicable inspection for the purpose of certification.	AVIA-1031	AVIA-1038		3	Perform to completion an applicable inspection for the purpose of certification.
25	0	11	a maintenance release including: (A) technical records entries; (B) certification forms; (C) weight and balance reports, and (D) other related documentation.	AVIA-1024 AVIA-1024 AVIA-1024 AVIA-1024 AVIA-1024	AVIA-1037 AVIA-1037 AVIA-1037 AVIA-1037 AVIA-1037	AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043 AVIA-1043	3 3 3 3 3	Perform a maintenance release including: Perform (A) technical records entries; Perform (B) certification forms; Perform (C) weight and balance reports, and Perform (D) other related documentation.
25	0	12	tasks utilizing and interpreting technical information systems.	AVIA 1049	AVIA-1037		3	Perform tasks utilizing and interpreting technical information systems.
				-	-	-	-	-
26.0 566.14 Small Aircraft				-	-	-	-	-
			(a) Explain:	-	-	-	-	-
26	0	1	the system logic and processes used to determine, develop and maintain the appropriate maintenance schedule.	AVIA-1031			2	Explain the system logic and processes used to determine, develop and maintain the appropriate maintenance schedule.
26	0	2	the procedures used to inspect and test the operation of avionics and auto-flight systems representative of those installed in small aircraft.	AVIA-1047			2	Explain the procedures used to inspect and test the operation of avionics and auto-flight systems representative of those installed in small aircraft.
26	0	3	types of non-destructive inspection procedures.	AVIA-1025	AVIA-1043		2	Explain types of non-destructive inspection procedures.
			(b) Perform:	-	-	-	-	-
26	0	4	servicing procedures on fixed and rotary wing aircraft.	AVIA 1050	AVIA 1053		3	Perform servicing procedures on fixed and rotary wing aircraft.
26	0	5	tasks utilizing minimum equipment lists, configuration deviation lists, and built-in test equipment programs.	AVIA-1043	AVIA-1047		3	Perform tasks utilizing minimum equipment lists, configuration deviation lists, and built-in test equipment programs.
26	0	6	scheduled and unscheduled inspections.	AVIA-1043			3	Perform scheduled and unscheduled inspections.
			(c) Test, troubleshoot, repair, adjust, remove and replace:	-	-	-	-	-
26	0	7	power plants and related systems.	AVIA-1044			3	Perform power plants and related systems.
26	0	8	propeller and rotor systems.	AVIA-1044			3	Perform propeller and rotor systems.
26	0	9	airframe and related systems.	AVIA-1044			3	Perform airframe and related systems.
26	0	10	electrical systems.	AVIA-1044			3	Perform electrical systems.
26	0	11	airframe structures.	AVIA-1044			3	Perform airframe structures.
26	0	12	dynamic components.	AVIA-1044			3	Perform dynamic components.
				-	-	-	-	-
27.0 566.15 Large Aircraft				-	-	-	-	-
			(a) Explain:	-	-	-	-	-
27	0	1	the procedures used to inspect and test the operation of avionics and auto-flight systems representative of those installed in large aircraft.	AVIA-1047			2	Explain the procedures used to inspect and test the operation of avionics and auto-flight systems representative of those installed in large aircraft.
27	0	2	the system logic and processes used to determine, develop and maintain the appropriate maintenance schedule	AVIA-1043	AVIA-1044	AVIA-1046	2	Explain the system logic and processes used to determine, develop and maintain the appropriate maintenance schedule.
27	0	3	types of non destructive inspection procedures.	AVIA-1025	AVIA-1043		2	Explain types of non destructive inspection procedures.

27	0	4	fault diagnostic systems typical of those installed on large aircraft.	AVIA-1046	AVIA-1047		2	Explain fault diagnostic systems typical of those installed on large aircraft.
27	0	5	mechanical and electronic systems including electrical/mechanical and digital control systems.	AVIA-1046	AVIA-1047		2	Explain mechanical and electronic systems including electrical/mechanical and digital control systems.
(b) Perform:								
27	0	6	servicing procedures on fixed and rotary wing aircraft.	AVIA-1044			3	Perform servicing procedures on fixed and rotary wing aircraft.
27	0	7	tasks utilizing minimum equipment lists; configuration deviation lists; and built in test equipment programs.	AVIA-1044			3	Perform tasks utilizing minimum equipment lists; configuration deviation lists; and built in test equipment programs.
27	0	8	scheduled and unscheduled inspections.	AVIA-1044			3	Perform scheduled and unscheduled inspections.
(c) Test, troubleshoot, repair, adjust, remove and replace:								
27	0	9	power plants and related systems.	AVIA-1044			3	Perform power plants and related systems.
27	0	10	propeller and rotor systems.	AVIA-1044			3	Perform propeller and rotor systems.
27	0	11	airframe and related systems.	AVIA-1044			3	Perform airframe and related systems.
27	0	12	electrical systems.	AVIA-1044			3	Perform electrical systems.
27	0	13	airframe structures.	AVIA-1044			3	Perform airframe structures.
27	0	14	dynamic components.	AVIA-1044			3	Perform dynamic components.
Chapter 566 appendix C - Part 1								
28.0 Regulatory Structure								
28	0	1	<i>Aeronautics Act</i>	AVIA-1024	AVIA-1033		2	Explain Aeronautics Act
28	0	2	<i>Canadian aviation Regulations (CARs)</i>	AVIA-1024	AVIA-1033		2	Explain Canadian aviation Regulations (CARs)
28	0	3	Standards	AVIA-1024	AVIA-1033		2	Explain Standards
28	0	4	Advisory Material	AVIA-1024	AVIA-1033		2	Explain Advisory Material
28	0	5	CARs numbering system	AVIA-1024	AVIA-1033		2	Explain CARs numbering system
28.1 CARs Part I - General Provisions								
28	1	1	CARs Part I Subpart 1 - interpretation	AVIA-1033			2	Explain CARs Part I Subpart 1 - interpretation
28	1	2	CARs Part I Subpart 2 - application	AVIA-1033			2	Explain CARs Part I Subpart 2 - application
28	1	3	CARs Part I Subpart 3 - Administration and compliance	AVIA-1033			2	Explain CARs Part I Subpart 3 - Administration and compliance
28	1	4	CARs Part I Subpart 4 - charges	AVIA-1033			2	Explain CARs Part I Subpart 4 - charges
28.2 CARs Part II - Aircraft Identification and Registration and Operation of a Leased Aircraft								
28	2	1	CARs Part II Subpart 1 - Identification of aircraft and Other Aeronautical Products	AVIA-1033			2	Explain CARs Part II Subpart 1 - Identification of aircraft and Other Aeronautical Products
28	2	2	CARs Part II Subpart 2 - aircraft Marking and Registration	AVIA-1033			2	Explain CARs Part II Subpart 2 - aircraft Marking and Registration
28.3 CARs Part IV - Subpart 3 - Aircraft Maintenance Engineer Licenses and Training								
28	3	1	403.01 application	AVIA-1033			2	Explain 403.01 application
28	3	2	403.02 requirement to Hold AME license	AVIA-1033			2	Explain 403.02 requirement to Hold AME license
28	3	3	403.03 Issuance and Endorsement of AME License	AVIA-1033			2	Explain 403.03 Issuance and Endorsement of AME License
28	3	4	403.04 Validity period of AME License	AVIA-1033			2	Explain 403.04 Validity period of AME License
28	3	5	403.05 recency requirements	AVIA-1033			2	Explain 403.05 recency requirements
28	3	6	403.08 approved Training Organizations	AVIA-1033			2	Explain 403.08 approved Training Organizations
28.4 CARs Part V - 501 Annual Airworthiness Information Report								
28	4	1	501.01 requirement to Report	AVIA-1033			2	Explain 501.01 requirement to Report
28	4	2	501.02 information to be Reported	AVIA-1033			2	Explain 501.02 information to be Reported
28	4	3	501.03 Reporting Schedule	AVIA-1033			2	Explain 501.03 Reporting Schedule
28.5 CARs Part V - 507 Flight Authority								
28	5	1	507.02 Certificate of airworthiness	AVIA-1033			2	Explain 507.02 Certificate of airworthiness
28	5	2	507.03 Special Certificate of airworthiness	AVIA-1033			2	Explain 507.03 Special Certificate of airworthiness
28	5	3	507.04 flight Permit	AVIA-1033			2	Explain 507.04 flight Permit
28	5	4	507.05 Validation of Foreign flight Authority	AVIA-1033			2	Explain 507.05 Validation of Foreign flight Authority
28	5	5	507.06 application for flight Authority	AVIA-1033			2	Explain 507.06 application for flight Authority
28	5	6	507.07 flight Authority for an imported aircraft	AVIA-1033			2	Explain 507.07 flight Authority for an imported aircraft
28	5	7	507.08 Issuance of Additional flight Authority	AVIA-1033			2	Explain 507.08 Issuance of Additional flight Authority
28	5	8	507.09 operating Conditions	AVIA-1033			2	Explain 507.09 operating Conditions
28	5	9	507.10 Persons Who May Attest to Condition and Conformity	AVIA-1033			2	Explain 507.10 Persons Who May Attest to Condition and Conformity
28	5	10	507.11 Duration of a flight Authority	AVIA-1033			2	Explain 507.11 Duration of a flight Authority
28	5	11	507.12 Alteration of Document	AVIA-1033			2	Explain 507.12 Alteration of Document
28.6 CARs Part V - 509 Export Airworthiness Certificates								
28	6	1	509.02 application for an Export airworthiness Certificate	AVIA-1033			2	Explain 509.02 application for an Export airworthiness Certificate
28	6	2	509.03 Authority for Export	AVIA-1033			2	Explain 509.03 Authority for Export
28	6	3	509.04 Persons Who May Attest to Condition and Conformity	AVIA-1033			2	Explain 509.04 Persons Who May Attest to Condition and Conformity
28	6	4	509.05 Responsibilities of the Exporter	AVIA-1033			2	Explain 509.05 Responsibilities of the Exporter
28.7 CARs Part V								
28	7	1	521 approval of the type design or a Change to the type design of an Aeronautical Product	AVIA-1033			2	Explain 521 approval of the type design or a Change to the type design of an Aeronautical Product
28	7	2	561 Manufacture of Aeronautical Products	AVIA-1033			2	Explain 561 Manufacture of Aeronautical Products
28	7	3	563 distribution of Aeronautical Products	AVIA-1033			2	Explain 563 distribution of Aeronautical Products
28	7	4	566 aircraft maintenance engineer Licensing and Training Standards	AVIA-1033			2	Explain 566 aircraft maintenance engineer Licensing and Training Standards
28.8 CARs Part V - 571 Aircraft Maintenance Requirements								
28	8	1	571.01 application	AVIA-1037			2	Explain 571.01 application
28	8	2	571.02 maintenance Performance Rules	AVIA-1037			2	Explain 571.02 maintenance Performance Rules
28	8	3	571.03 recording of maintenance and Elementary Work	AVIA-1037			2	Explain 571.03 recording of maintenance and Elementary Work
28	8	4	571.04 Specialized maintenance	AVIA-1037			2	Explain 571.04 Specialized maintenance
28	8	5	571.05 maintenance of Aeroplanes or Helicopters operated pursuant to Part IV and aircraft operated pursuant to Part VII	AVIA-1037			2	Explain 571.05 maintenance of Aeroplanes or Helicopters operated pursuant to Part IV and aircraft operated pursuant to Part VII
28	8	6	571.06 Repairs and Modifications	AVIA-1037			2	Explain 571.06 Repairs and Modifications
28	8	7	571.07 installation of New Parts	AVIA-1037			2	Explain 571.07 installation of New Parts
28	8	8	571.08 installation of used Parts	AVIA-1037			2	Explain 571.08 installation of used Parts
28	8	9	571.09 installation of Life-Limited Parts	AVIA-1037			2	Explain 571.09 installation of Life-Limited Parts
28	8	10	571.10 maintenance Release	AVIA-1037			2	Explain 571.10 maintenance Release
28	8	11	571.11 Persons who May Sign a maintenance Release	AVIA-1037			2	Explain 571.11 Persons who May Sign a maintenance Release
28	8	12	571.12 Reporting Major Repairs and Major Modifications	AVIA-1037			2	Explain 571.12 Reporting Major Repairs and Major Modifications
28	8	13	571.13 installation of Parts (general)	AVIA-1037			2	Explain 571.13 installation of Parts (general)
28	8	14	Schedule I - Personnel Certification for Non-destructive testing (NDT)	AVIA-1037			2	Explain Schedule I - Personnel Certification for Non-destructive testing (NDT)

28	8	15	Schedule II - Specialized maintenance	AVIA-1037			2	Explain Schedule II - Specialized maintenance
28.9 CARs Part V - 573 Approved Maintenance Organization				-	-	-	-	-
28	9	1	573.01 application for approval	AVIA-1037			2	Explain 573.01 application for approval
28	9	2	573.02 Entitlement to and Scope of Certificate	AVIA-1037			2	Explain 573.02 Entitlement to and Scope of Certificate
28	9	3	573.03 Person Responsible for maintenance	AVIA-1037			2	Explain 573.03 Person Responsible for maintenance
28	9	4	573.04 assignment of management functions	AVIA-1037			2	Explain 573.04 assignment of management functions
28	9	5	573.05 Authorization to Sign a maintenance Release	AVIA-1037			2	Explain 573.05 Authorization to Sign a maintenance Release
28	9	6	573.06 Training Program	AVIA-1037			2	Explain 573.06 Training Program
28	9	7	573.07 Personnel records	AVIA-1037			2	Explain 573.07 Personnel records
28	9	8	573.08 facilities, Equipment, Standards and Procedures	AVIA-1037			2	Explain 573.08 facilities, Equipment, Standards and Procedures
28	9	9	573.09 Quality assurance Program	AVIA-1037			2	Explain 573.09 Quality assurance Program
28	9	10	573.10 maintenance Policy Manual	AVIA-1037			2	Explain 573.10 maintenance Policy Manual
28	9	11	573.11 maintenance Arrangements	AVIA-1037			2	Explain 573.11 maintenance Arrangements
28	9	12	573.12 service difficulty Reporting	AVIA-1037			2	Explain 573.12 service difficulty Reporting
28	9	13	573.13 Foreign approvals	AVIA-1037			2	Explain 573.13 Foreign approvals
28	9	14	573.14 Identification of an AMO	AVIA-1037			2	Explain 573.14 Identification of an AMO
28.10 CARs Part VI - Subpart 4 - Private Operator Pax Trans - Division VI (VIII) Maintenance				-	-	-	-	-
28	10	1	604.48 (604.127) maintenance control system	AVIA-1037	AVIA-1043		2	Explain 604.48 (604.127) maintenance control system
28	10	2	604.49 (N/A) description of maintenance control system in operations Manual	AVIA-1037	AVIA-1043		2	Explain 604.49 (N/A) description of maintenance control system in operations Manual
28	10	3	604.50 (604.126) Person Responsible for maintenance control system	AVIA-1037	AVIA-1043		2	Explain 604.50 (604.126) Person Responsible for maintenance control system
28	10	4	604.51 maintenance Personnel and facilities	AVIA-1037	AVIA-1043		2	Explain 604.51 maintenance Personnel and facilities
28	10	5	604.52 (604.129) Defect Reporting and recertification control Procedures	AVIA-1037	AVIA-1043		2	Explain 604.52 (604.129) Defect Reporting and recertification control Procedures
28	10	6	604.53 (604.130) service difficulty Reporting	AVIA-1037	AVIA-1043		2	Explain 604.53 (604.130) service difficulty Reporting
28	10	7	604.54 Technical dispatch instructions	AVIA-1037	AVIA-1043		2	Explain 604.54 Technical dispatch instructions
28	10	8	604.55 (604.131) service information Review	AVIA-1037	AVIA-1043		2	Explain 604.55 (604.131) service information Review
28	10	9	604.56 maintenance Agreements	AVIA-1037	AVIA-1043		2	Explain 604.56 maintenance Agreements
28	10	10	604.57 maintenance Training	AVIA-1037	AVIA-1043		2	Explain 604.57 maintenance Training
28.11 CARs Part VI - Subpart 5 - Division I - Aircraft Requirements - General				-	-	-	-	-
28	11	1	605.03 flight Authority	AVIA-1033			2	Explain 605.03 flight Authority
28	11	2	605.04 Availability of aircraft flight Manual	AVIA-1033			2	Explain 605.04 Availability of aircraft flight Manual
28	11	3	605.05 Markings and Placards	AVIA-1033			2	Explain 605.05 Markings and Placards
28	11	4	605.06 aircraft Equipment Standards and serviceability	AVIA-1033			2	Explain 605.06 aircraft Equipment Standards and serviceability
28	11	5	605.07 Minimum Equipment Lists	AVIA-1033			2	Explain 605.07 Minimum Equipment Lists
28	11	6	605.08 Unserviceable and removed Equipment - general	AVIA-1033			2	Explain 605.08 Unserviceable and removed Equipment - general
28	11	7	605.09 Unserviceable and removed Equipment - aircraft with a Minimum Equipment L	AVIA-1033			2	Explain 605.09 Unserviceable and removed Equipment - aircraft with a Minimum Equipment List
28	11	8	605.10 Unserviceable and removed Equipment - aircraft Without a Minimum Equipme	AVIA-1033			2	Explain 605.10 Unserviceable and removed Equipment - aircraft Without a Minimum Equipment List
28.12 CARs Part VI - Subpart 4 - Private Operator Passenger Transportation - Division III -				-	-	-	-	-
28	12	1	605.84 aircraft maintenance - general	AVIA-1037	AVIA-1043		2	Explain 605.84 aircraft maintenance - general
28	12	2	605.85 maintenance Release and Elementary Work	AVIA-1037	AVIA-1043		2	Explain 605.85 maintenance Release and Elementary Work
28	12	3	605.86 maintenance Schedule	AVIA-1037	AVIA-1043		2	Explain 605.86 maintenance Schedule
28	12	4	605.87 transfer of Aeronautical Products Between maintenance Schedules	AVIA-1043			2	Explain 605.87 transfer of Aeronautical Products Between maintenance Schedules
28	12	5	605.88 inspection after Abnormal Occurrences	AVIA-1043			2	Explain 605.88 inspection after Abnormal Occurrences
28.13 CARs Part VI - Subpart 4 - Private Operator Passenger Transportation - Division IV -				-	-	-	-	-
28	13	1	605.92 requirement to Keep Technical records	AVIA-1037	AVIA-1043		2	Explain 605.92 requirement to Keep Technical records
28	13	2	605.93 Technical records - general	AVIA-1037	AVIA-1043		2	Explain 605.93 Technical records - general
28	13	3	605.94 Journey Log requirements	AVIA-1037	AVIA-1043		2	Explain 605.94 Journey Log requirements
28	13	4	605.95 Journey Log - Carrying on Board	AVIA-1037	AVIA-1043		2	Explain 605.95 Journey Log - Carrying on Board
28	13	5	605.96 requirements for Technical records Other Than the Journey Log	AVIA-1037	AVIA-1043		2	Explain 605.96 requirements for Technical records Other Than the Journey Log
28	13	6	605.97 transfer of records	AVIA-1043			2	Explain 605.97 transfer of records
28.14 CARs Part VII - Subpart 6 - Aircraft Maintenance Requirements for Air Operators				-	-	-	-	-
28	14	1	706.01 application	AVIA-1037			2	Explain 706.01 application
28	14	2	706.02 maintenance control system	AVIA-1037			2	Explain 706.02 maintenance control system
28	14	3	706.03 Person Responsible for the maintenance control system	AVIA-1037			2	Explain 706.03 Person Responsible for the maintenance control system
28	14	4	706.04 maintenance Personnel and facilities	AVIA-1037			2	Explain 706.04 maintenance Personnel and facilities
28	14	5	706.05 Defect rectification and control Procedures	AVIA-1037			2	Explain 706.05 Defect rectification and control Procedures
28	14	6	706.06 Technical dispatch Procedures	AVIA-1037			2	Explain 706.06 Technical dispatch Procedures
28	14	7	706.07 evaluation Program	AVIA-1037			2	Explain 706.07 evaluation Program
28	14	8	706.08 maintenance control Manual (MCM)	AVIA-1037			2	Explain 706.08 maintenance control Manual (MCM)
28	14	9	706.09 maintenance Arrangements	AVIA-1037			2	Explain 706.09 maintenance Arrangements
28	14	10	706.10 Elementary Work	AVIA-1037			2	Explain 706.10 Elementary Work
28	14	11	706.11 servicing	AVIA-1037			2	Explain 706.11 servicing
28	14	12	706.12 Training Program	AVIA-1037			2	Explain 706.12 Training Program
28	14	13	706.13 Personnel records	AVIA-1037			2	Explain 706.13 Personnel records
28	14	14	706.14 service difficulty Reporting	AVIA-1037			2	Explain 706.14 service difficulty Reporting
				-	-	-	-	-

Gedies, Tracy

AAM 1

From: Gedies, Tracy
Sent: Wednesday, January 21, 2015 9:26 AM
To: Schiestel, Nancy; Gorrie, Rob
Cc: Cecil, Ben; Coligan, Vertha; Casson, Graham; De Groot, Elizabeth
Subject: Degree audits
Attachments: FANS - Aviation Technician - Aircraft Maintenance.doc; Annual Degree Audit Change Form-Oct 2014.docx; Degree Audit Change Information (Annual Late) and Timelines.docx

Hi Nancy and Rob,

Thanks so much for meeting with me last week to discuss the degree audit submissions. As a follow up, I thought it might be helpful if I sent the DA Change Information and Timelines file and provided a summary of our discussion:

1. AAM1 – mapping attached in CVS application (appendix A-Form 1). Please amend mapping to show how the 5 revised courses still align with VLOs. Student signatures* required for those in the 14/15 catalogue
2. FEM2 – Nancy to follow up with Susan and/or Terry Dobson
3. JDA2 – Please amend mapping to show how the new/revised courses still align with VLOs. Student signatures* required for those in the 14/15 catalogue.
4. PLT2 – Nancy to follow up with Terry and/or Susan Dobson
5. PRT1 – delay 2015/16 DA changes until the program review which is currently underway is complete; 2013/14 and 2014/15 require mapping and student signatures* for the 2014/15 catalogue. An exception will have to be made for the graduates from the 2013/14 catalogue.

*As stated in the DA Change Information and Timelines file (p. 4), include documentation that demonstrates there is unanimous support for the proposed change by the students currently enrolled in the affected term if the late DA impacts current or past academic catalogues. It is suggested a 48 hour window be provided for students to vote on the change using FOL. If students do not respond, consent may be assumed.

If you have any questions, please do not hesitate to call. The Registrar's Office would like the DA approvals done before the end of January.

Thanks.

*Tracy Gedies, Ed. D.
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